

Pedorthic Exam Review Volume II

Rick E. Sevier BS Ed. C. Ped.



Allied Health Education

An orthosis designed with a primary goal of conforming to the individual's anatomy is known as:

- A. Functional
- B. Accommodative
- C. Idiopathic
- D. Superior



An orthosis designed with a primary goal of conforming to the individual's anatomy is known as:

- A. Functional
- B. Accommodative**
- C. Idiopathic
- D. Superior



- Accommodative orthotics accommodate to the present anatomy. They are used primarily to cushion and protect rather than to mold and change.



A front laced shoe in which the quarters meet and the vamp is stitched over the quarters at the front of the throat is known as:

- A. Blucher
- B. Chukka
- C. Balmoral
- D. Oxford

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- B. Chukka
- C. Balmoral**
- D. Oxford

- AKA Bal; A front laced shoe in which the quarters meet and the vamp is stitched over the quarters at the front of the throat. The word is an abbreviation of Balmoral



A Last that deviates from standard proportions in that the heel is two to three widths narrower than the ball in exact proportions is known as a/an:

- A. Inflare Last
- B. Reverse Last
- C. Straight Last
- D. Combination Last



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- A. Inflare Last
- B. Reverse Last
- C. Straight Last
- D. Combination Last**



- Last that deviates from standard proportions; the heel is two to three widths narrower than the ball in exact proportions.
- This last is designed for individuals that have a wide forefoot and a narrow hindfoot.



Arthrodesis refers to:

- A. joint hypermobility
- B. mid foot fracture
- C. joint fixation
- D. removal of a toe



Arthrodesis refers to:

- A. joint hypermobility
- B. mid foot fracture
- C. **joint fixation**
- D. removal of a toe



- Arthrodesis is joint fixation. It can either be naturally occurring from arthritis or can be done surgically – usually to relieve pain.



The plane which divides the body into anterior and posterior portions is referred to as the _____ plane.

- A. frontal
- B. sagittal
- C. transverse
- D. horizontal

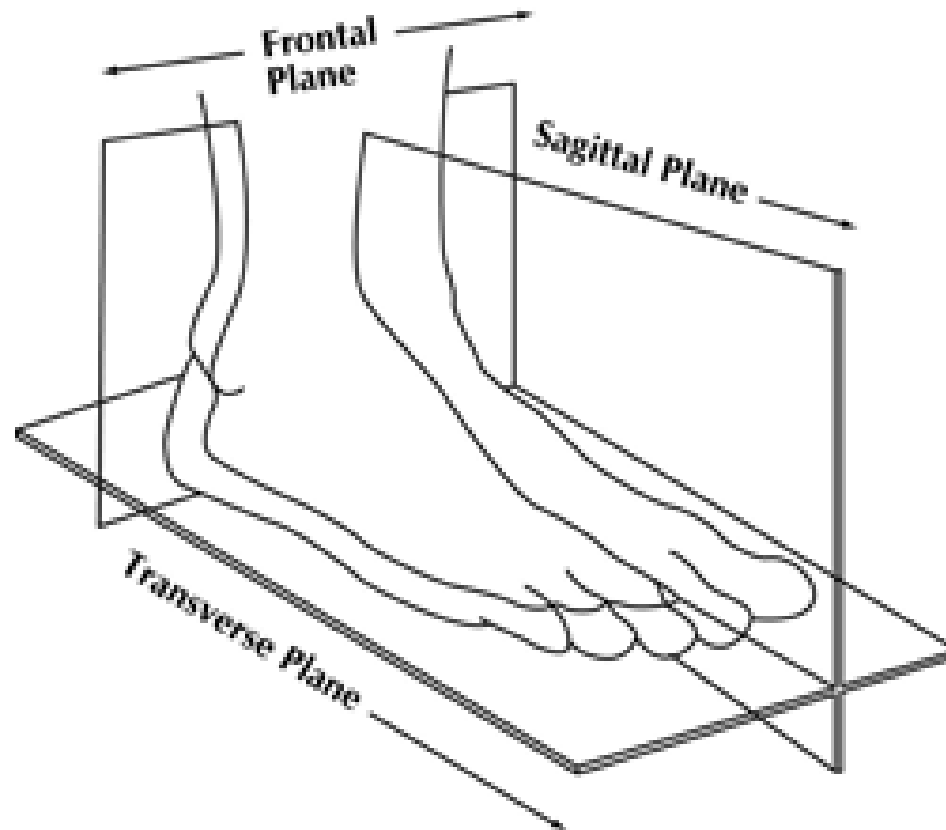


The plane which divides the body into anterior and posterior portions is referred to as the _____ plane.

- A. **frontal**
- B. sagittal
- C. transverse
- D. horizontal



- The frontal plane divides the body into anterior and posterior.



A/An _____ is a prefabricated removable component upon which the foot directly rests inside the shoe.

- A. midsole
- B. inlay
- C. vamp
- D. outsole

A/An _____ is a prefabricated removable component upon which the foot directly rests inside the shoe.

- A. midsole
- B. **inlay**
- C. vamp
- D. outsole

- An Inlay is a prefabricated removable material upon which the foot directly rests inside the shoe. The inlay is an integral design component of some shoes.

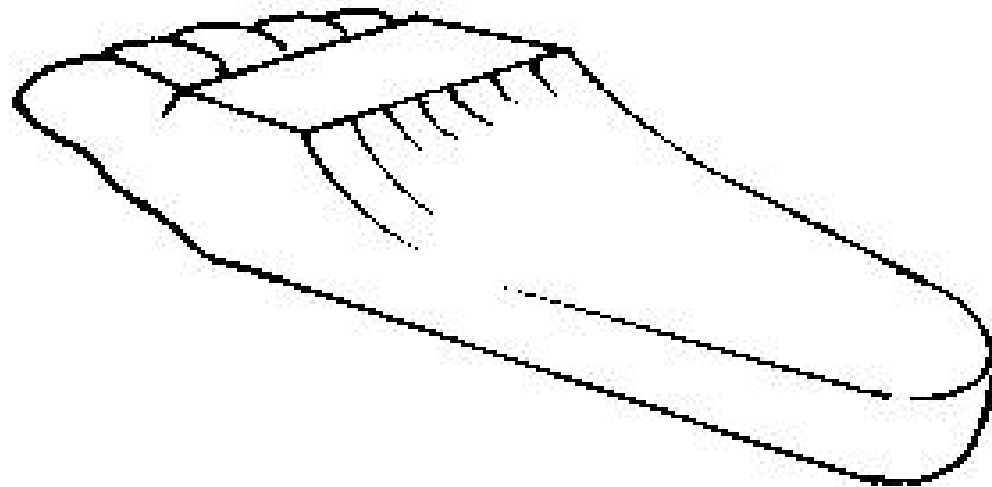
Modifications that are sculpted into or added onto the positive model of the foot are referred to as:

- A. extrinsic
- B. internal
- C. external
- D. intrinsic

Modifications that are sculpted into or added onto the positive model of the foot are referred to as:

- A. extrinsic
- B. internal
- C. external
- D. **intrinsic**

- Intrinsic refers to modifications sculpted into or added onto the positive model of the foot. These are then "built into" the shape of an orthosis of a custom shoe.



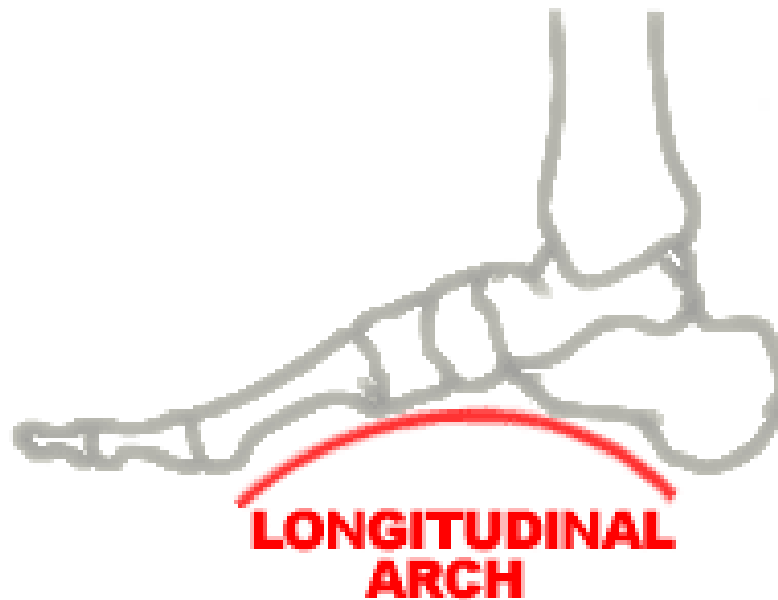
The arch of hindfoot and midfoot from mid-calcaneus extending proximal to the first metatarsal head is referred to as the _____ arch.

- A. metatarsal
- B. transverse
- C. longitudinal
- D. tarsal

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- Arch of hindfoot and midfoot from mid-calcaneus extending proximal to the first metatarsal head on the medial side.



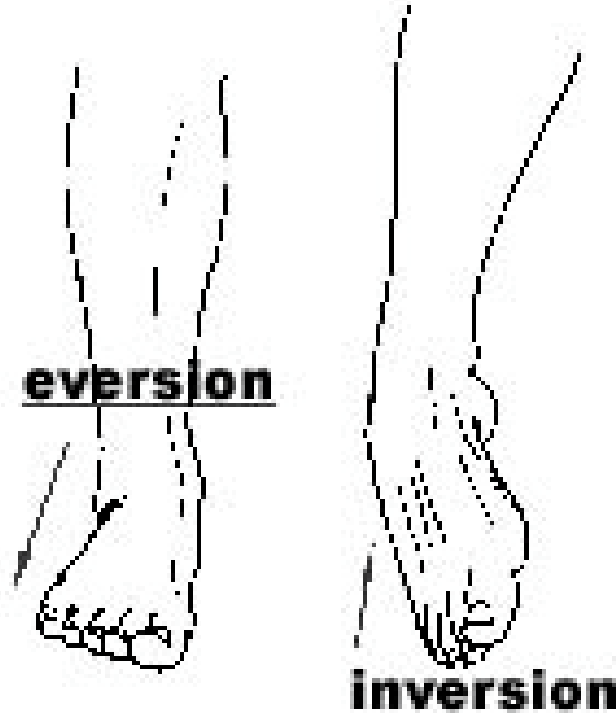
Elevation of the inner border of the foot, in the frontal plane is known as:

- A. Inversion
- B. Eversion
- C. Plantarflexion
- D. Dorsiflexion

Elevation of the inner border of the foot, in the frontal plane is known as:

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- B. Eversion
- C. Plantarflexion
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- Inversion is elevation of the medial side of the foot in the frontal plane.



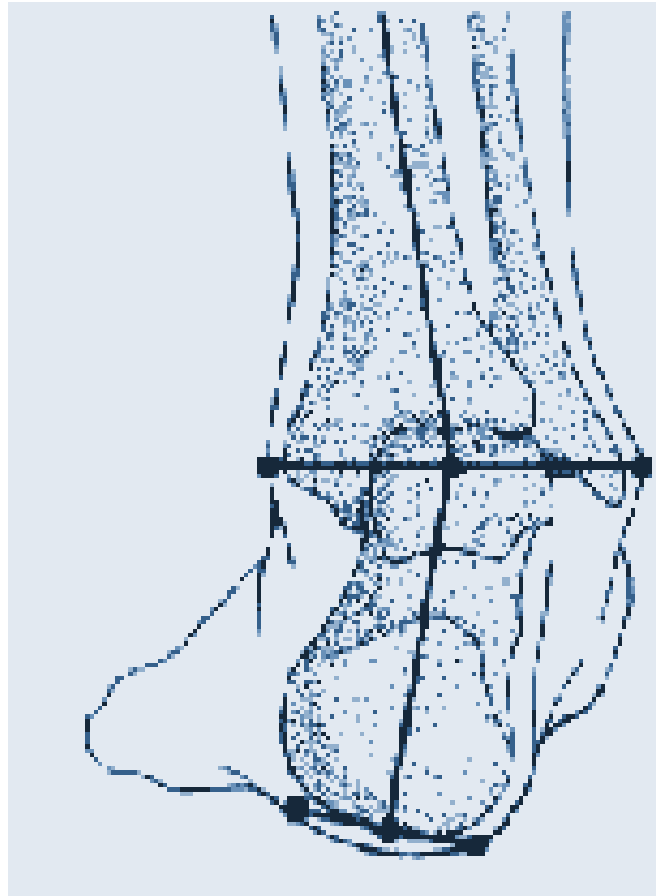
_____ is a tri-plane motion of the foot consisting of inversion, plantar flexion, and adduction.

- A. Pronation
- B. Supination
- C. Hyperextension
- D. Hyperflexion

_____ is a tri-plane motion of the foot consisting of inversion, plantar flexion, and adduction.

- A. Pronation
- B. **Supination**
- C. Hyperextension
- D. Hyperflexion

- Supination consists of inversion, plantarflexion, and adduction.



The subtalar joint is also known as the:

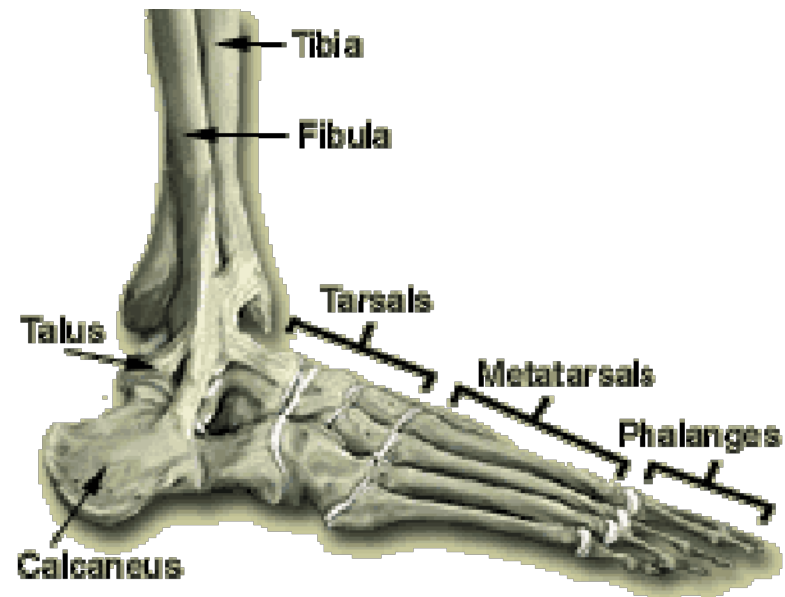
- A. transverse tarsal
- B. talonavicular
- C. calcaneocuboid
- D. talocalcaneal



The subtalar joint is also known as the:

- A. transverse tarsal
- B. talonavicular
- C. calcaneocuboid
- D. **talocalcaneal**

- Talocalcaneal Joint



What bone is also known as the os calcis?

- A. talus
- B. navicular
- C. calcaneus
- D. cuboid

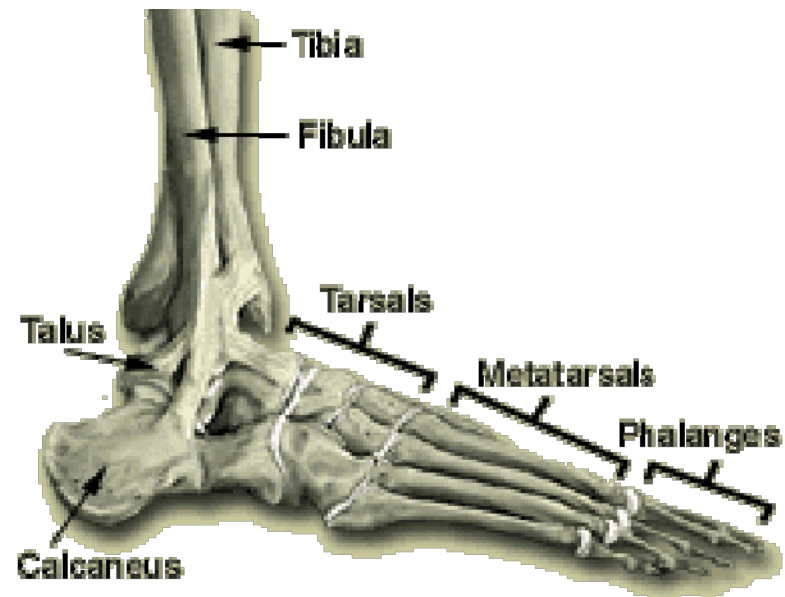


What bone is also known as the os calcis?

- A. talus
- B. navicular
- C. **calcaneus**
- D. cuboid



- Os Calcis



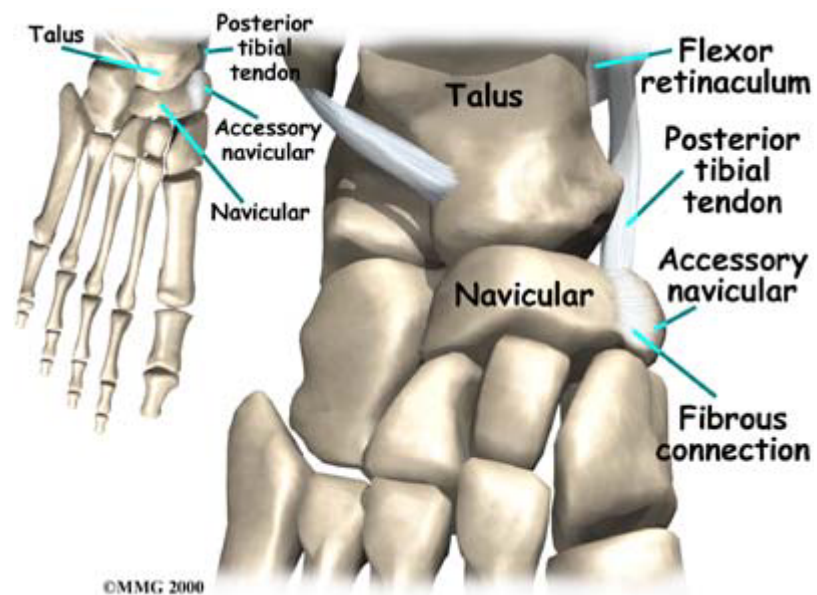
The scaphoid is also known as the:

- A. cuboid
- B. medial cuneiform
- C. navicular
- D. talus

The scaphoid is also known as the:

- A. cuboid
- B. medial cuneiform
- C. **navicular**
- D. talus

Navicular (Scaphoid)



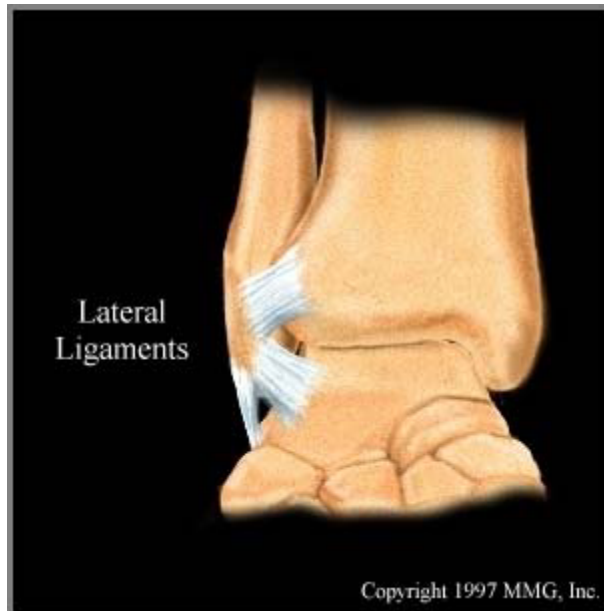
Ligaments:

- A. Connect bone to bone
- B. Connect tendon to bone
- C. Connect muscle to bone
- D. Connect muscle to tendon

Ligaments:

- A. **Connect bone to bone**
- B. Connect tendon to bone
- C. Connect muscle to bone
- D. Connect muscle to tendon

- Band of fibrous, elastic tissue that connects bones and joints.



Which of the following bones is not a tarsal bone:

- A. Calcaneus
- B. Talus
- C. Metatarsal
- D. Cuneiforms

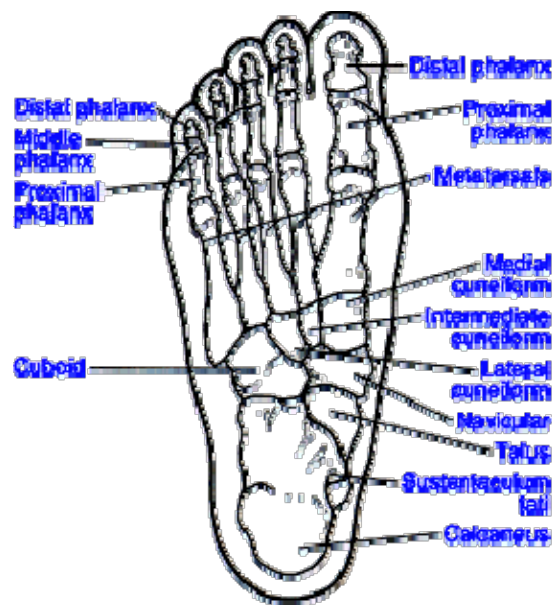


Which of the following bones is not a tarsal bone:

- A. Calcaneus
- B. Talus
- C. **Metatarsal**
- D. Cuneiforms



- Metatarsals: Five slender, finger-like bones between the tarsal bones and toe bones.



Which phalanx has 2 bones?

- A. Hallux
- B. Second toe
- C. Third toe
- D. Fifth toe

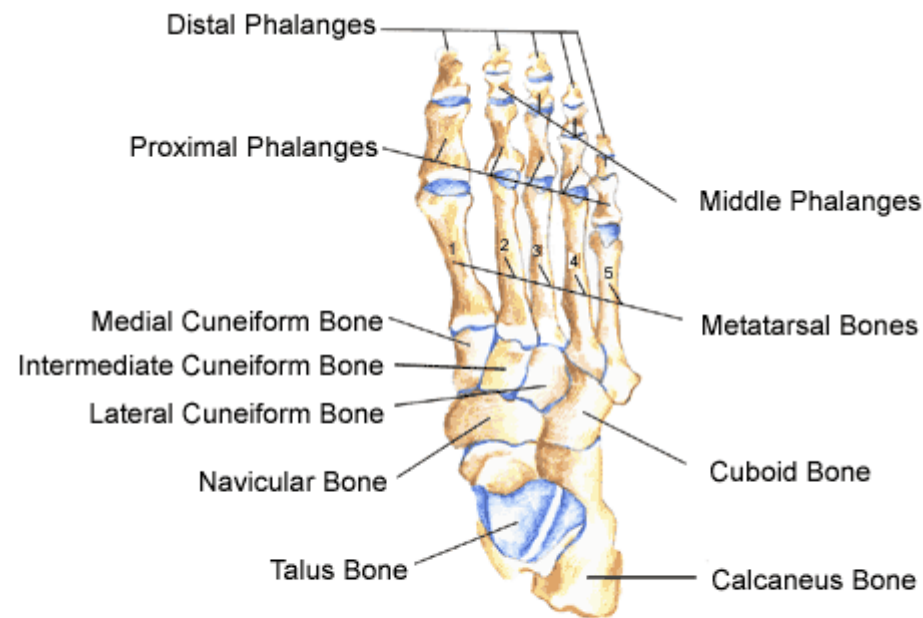


Which phalanx has 2 bones?

- A. **Hallux**
- B. Second toe
- C. Third toe
- D. Fifth toe



- Hallux has 2 bones. Other phalanges have 1 bone each.



Top View of Foot Bones

Another name for the ankle joint is:

- A. Subtalar joint
- B. Midtarsal joint
- C. Talocrural joint
- D. Tibial fibular syndesmosis



Another name for the ankle joint is:

- A. Subtalar joint
- B. Midtarsal joint
- C. **Talocrural joint**
- D. Tibial fibular syndesmosis

- Talocrural Joint formed by the lower ends of the two leg bones (tibia and fibula) and the talus bone of the foot. A hinge joint.



The sinus tarsi is:

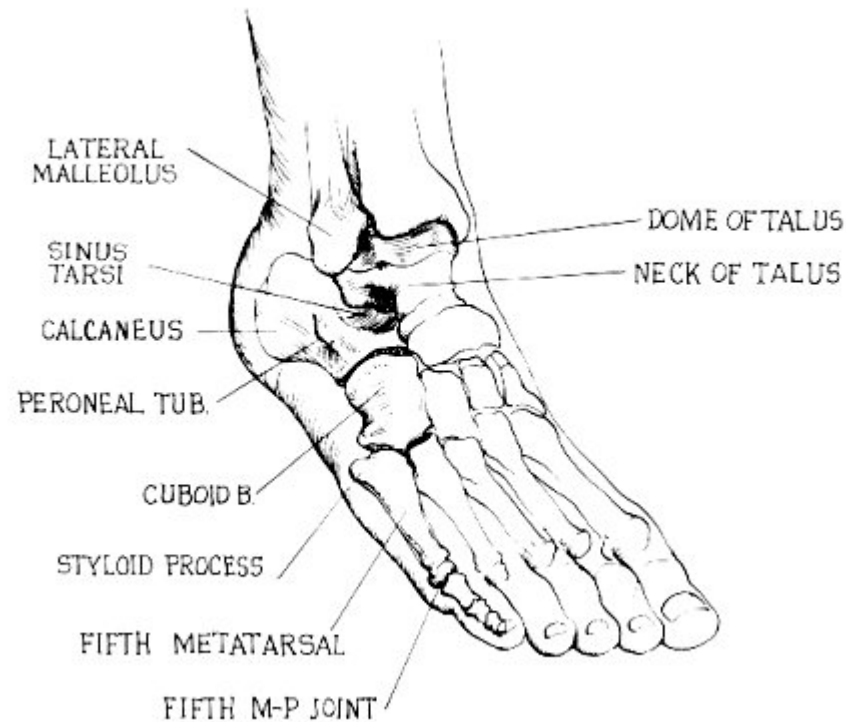
- A. A bone infection
- B. The attachment point of the Achilles tendon
- C. A space between the talus and the calcaneus
- D. The space between the metatarsal bones



The sinus tarsi is:

- A. A bone infection
- B. The attachment point of the Achilles tendon
- C. A space between the talus and the calcaneus**
- D. The space between the metatarsal bones

- **Sinus Tarsi: The space between the talus and the calcaneus**



The deltoid ankle ligament is:

- A. one ligament that attaches the fibula to the tibia
- B. a complex of 3 ligaments
- C. a complex of ligaments on the medial side of the ankle
- D. the calcaneal fibular ligament

The deltoid ankle ligament is:

- A. one ligament that attaches the fibula to the tibia
- B. a complex of 3 ligaments
- C. a complex of ligaments on the medial side of the ankle**
- D. the calcaneal fibular ligament

- **The Deltoid Ligament** The deltoid ligament is a strong, flat, triangular band, attached, *above*, to the apex and anterior and posterior borders of the medial malleolus. It consists of two sets of fibers, superficial and deep.



The following structure attaches muscle to bone:

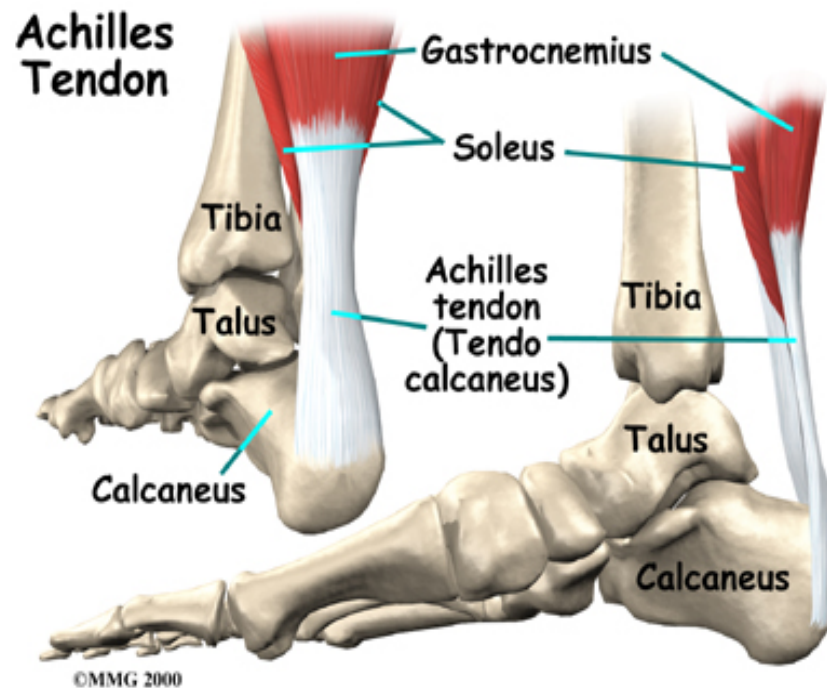
- A. Ligament
- B. Fascia
- C. Artery
- D. Tendon



The following structure attaches muscle to bone:

- A. Ligament
- B. Fascia
- C. Artery
- D. **Tendon**

- Tendons: Fibrous cords that connect muscle to bone.



The gait cycle is defined as:

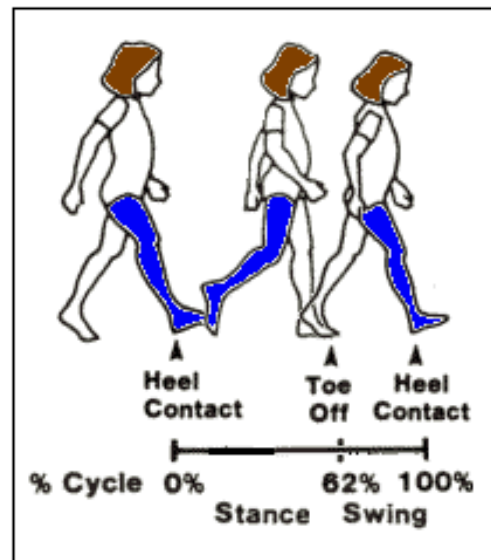
- A. The interval from toe off to the toe off of the opposite foot
- B. The interval from heel strike of one foot to heel strike by the same foot at the next step
- C. The interval from midfoot stance to toe off
- D. None of these.



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- A. The interval from toe off to the toe off of the opposite foot
- B. The interval from heel strike of one foot to heel strike by the same foot at the next step**
- C. The interval from midfoot stance to toe off
- D. None of these.

- The gait cycle begins when the heel of one foot contacts the ground and ends when that foot contacts the ground again. Thus, each cycle begins at initial contact with a stance phase and proceeds through a swing phase until the cycle ends with the limb's next initial contact.



The main phases of gait include:

- A. Stance phase and swing phase
- B. Static phase and swing phase
- C. Swing phase and inactive phase
- D. Inactive and stance phase



The main phases of gait include:

- A. **Stance phase and swing phase**
- B. Static phase and swing phase
- C. Swing phase and inactive phase
- D. Inactive and stance phase

- In the basic gait cycle the movements are divided into the times when the foot is on the ground (the **stance phase** which takes up 62% of the full gait cycle) and when the foot is off the ground (the **swing phase** which takes up the remaining 38% of one full gait cycle).



How much of the gait cycle consists of double support?

- A. 6%
- B. 12%
- C. 24%
- D. 36%

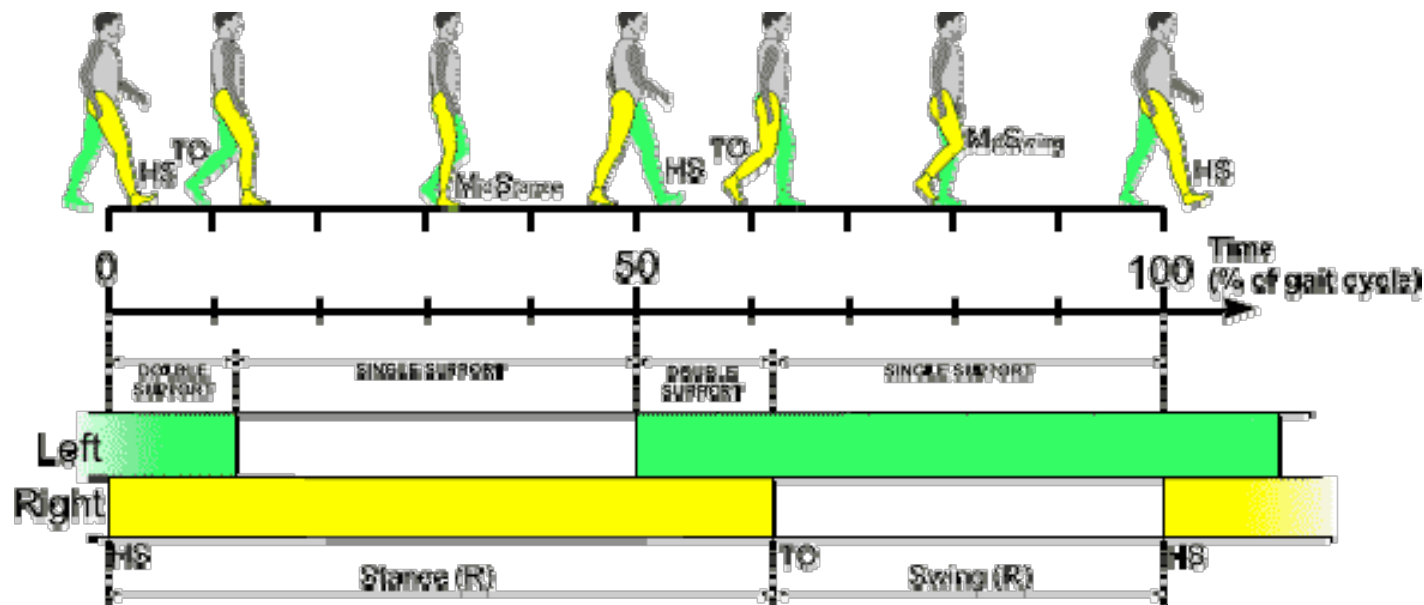


How much of the gait cycle consists of double support?

- A. 6%
- B. 12%
- C. **24%**
- D. 36%



- Double limb support occurs for two periods of 12% of the gait cycle in a normal walk. Double limb support occurs between heel strike of the limb and toe off of the contralateral limb.



Abduction of the foot occurs in the _____ plane.

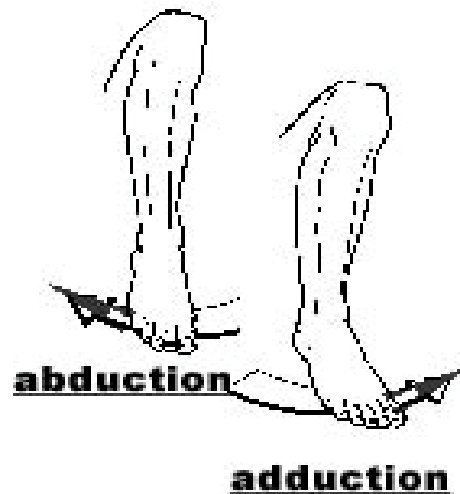
- A. Frontal
- B. Sagittal
- C. Transverse
- D. Coronal



Abduction of the foot occurs in the _____ plane.

- A. Frontal
- B. Sagittal
- C. **Transverse**
- D. Coronal

- Abduction: Motion of a body part away from the midline of the body, in a transverse plane.



Pronation is a tri-plane motion consisting of:

- A. eversion, dorsiflexion and abduction
- B. inversion, plantarflexion and adduction
- C. inversion, dorsiflexion and abduction
- D. eversion, plantarflexion and abduction

Pronation is a tri-plane motion consisting of:

- A. **eversion, dorsiflexion and abduction**
- B. inversion, plantarflexion and adduction
- C. inversion, dorsiflexion and abduction
- D. eversion, plantarflexion and abduction



- Pronation: Tri-plane motion of the foot consisting of eversion, dorsiflexion, and abduction; opposite of Supination.



The term inferior refers to which of the following:

- A. Away from the midline of the body
- B. Toward the feet
- C. Away from the trunk
- D. Toward the midline of the body



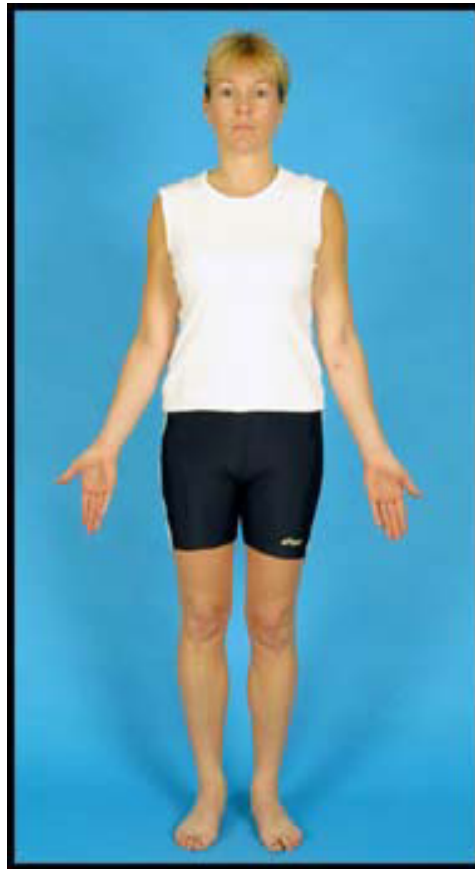
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- D. Toward the midline of the body



- **Inferior:** This is a general anatomical term of direction or position. It is the equivalent of **below** or **downwards**.

Superior



Inferior

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Which term refers to bending the ankle upward:

- A. Abduction
- B. Adduction
- C. Dorsiflexion
- D. Plantarflexion

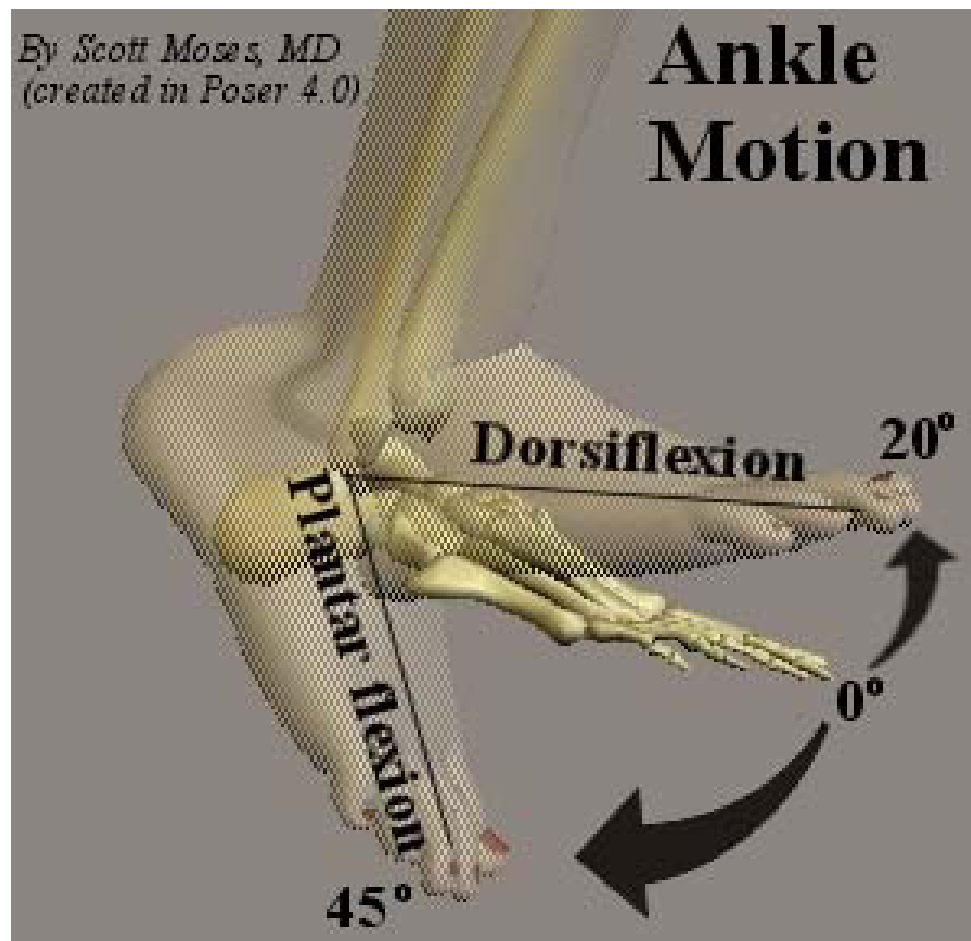


Which term refers to bending the ankle upward:

- A. Abduction
- B. Adduction
- C. **Dorsiflexion**
- D. Plantarflexion



- Dorsiflexion: Movement of the foot upward toward the ankle in the Sagittal plane of the body. Opposite of Plantarflexion.



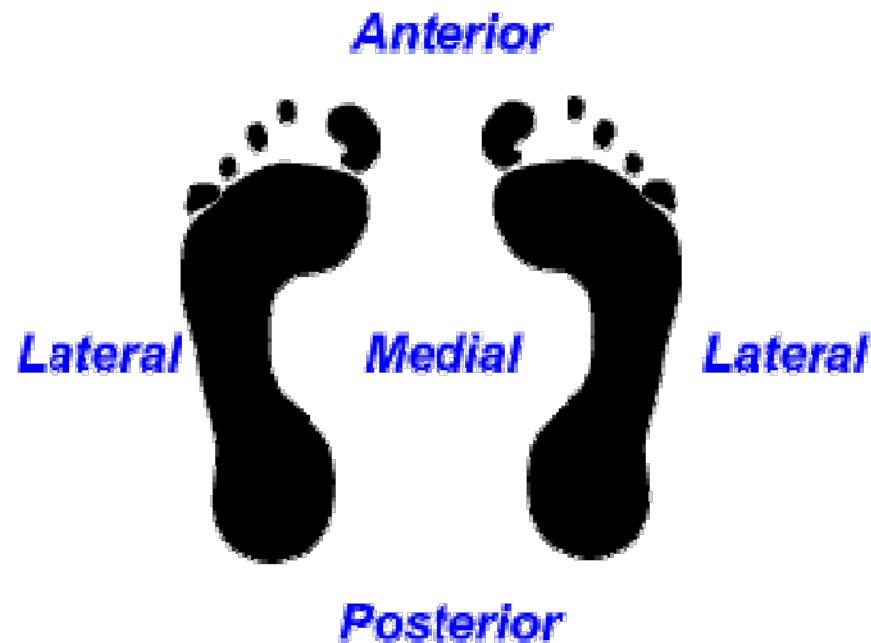
The term anterior refers to which of the following:

- A. Toward the feet
- B. Away from the midline of the body
- C. Away from the trunk
- D. Toward the front portion of the body**

The term anterior refers to which of the following:

- A. Toward the feet
- B. Away from the midline of the body
- C. Away from the trunk
- D. **Toward the front portion of the body**

Anterior: Toward the front of the body



Achilles Tendonitis is also known as:

- A. Plantar Fasciitis
- B. Heel Spurs
- C. Sever's Disease
- D. Peritendonitis

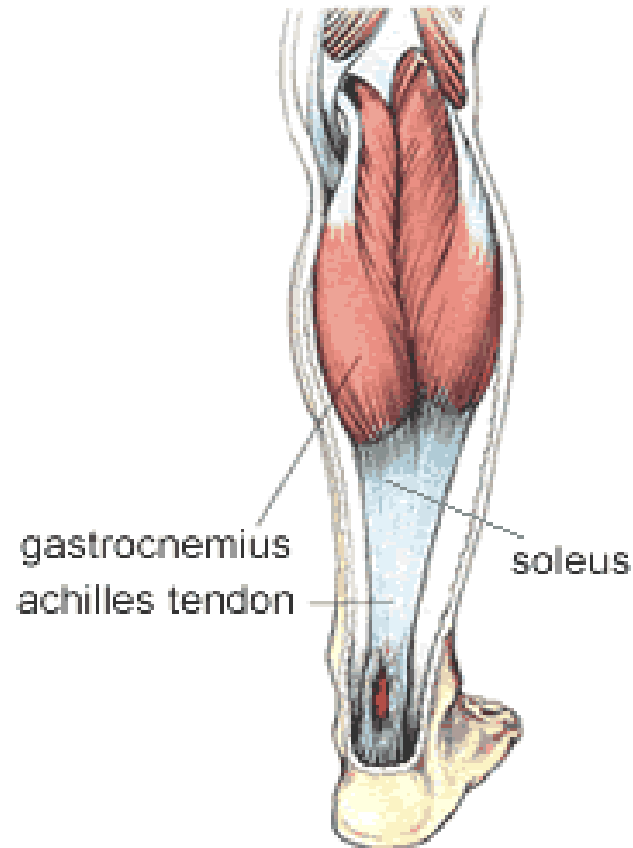


Achilles Tendonitis is also known as:

- A. Plantar Fasciitis
- B. Heel Spurs
- C. Sever's Disease
- D. **Peritendonitis**



- Peritendinitis: Inflammation of the Achilles Tendon (Achilles Tendonitis)



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Bunions are most often associated with what anatomical position?

- A. plantarflexion
- B. hallux varus
- C. hallux valgus
- D. dorsiflexion



Bunions are most often associated with what anatomical position?

- A. plantarflexion
- B. hallux varus
- C. **hallux valgus**
- D. dorsiflexion

- Hallux valgus: Lateral deviation (position) of the great toe (first ray). Frequently leads to bunions which is the bursa or bony growth.



A severely cavus foot is one indication of what pathology?

- A. Charcot Foot
- B. Charcot-Marie-Tooth
- C. Posterior tibial tendon dysfunction
- D. Pes planovalgus



A severely cavus foot is one indication of what pathology?

- A. Charcot Foot
- B. **Charcot-Marie-Tooth**
- C. Posterior tibial tendon dysfunction
- D. Pes planovalgus

- A neurological disorder affecting the nerves that control the muscles. Results in the degeneration of the nerves in the extremities which causes a gradual loss of normal use of the feet/legs, and hands/arms. Characteristics include a high-arched Pes Cavus foot with hammer toes, foot drop and frequent ankle Strains.

Areas of white moist skin between the fourth and fifth toes may indicate:

- A. Soft corns
- B. Hard Corns
- C. Heloma durum
- D. Calluses

Areas of white moist skin between the fourth and fifth toes may indicate:

- A. **Soft corns**
- B. Hard Corns
- C. Heloma durum
- D. Calluses

- Soft Corns: Damp, whitish mass of skin that forms in the web between two toes from constant shoe pressure.



_____ is a condition, where the navicular bone in the foot undergoes avascular necrosis.

- A. Freiberg's Infraction
- B. Tarsal Coalition
- C. Haglund's Syndrome
- D. Kohler's disease

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- A. Freiberg's Infraction
- B. Tarsal Coalition
- C. Haglund's Syndrome
- D. **Kohler's disease**

Sclerosis, irregularity and early collapse of the tarsal navicular consistent with avascular necrosis (Kohler's Disease)



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A burning sensation on the dorsal aspect of the foot between the third and fourth digits may be an indication of:

- A. Plantar Fasciitis
- B. Metatarsalgia
- C. Sesamoiditis
- D. Morton's Neuroma

A burning sensation on the dorsal aspect of the foot between the third and fourth digits may be an indication of:

- A. Plantar Fasciitis
- B. Metatarsalgia
- C. Sesamoiditis
- D. **Morton's Neuroma**

- Neuroma pain is classically described as a burning pain in the forefoot. It can also be felt as an aching or shooting pain in the forefoot. Patients with this problem frequently say they feel like they want to take off their shoes and rub their foot. This pain may occur in the middle of a run or at the end of a long run. If your shoes are quite tight or the Neuroma is very large, the pain may be present even when walking. Occasionally a sensation of numbness is felt in addition to the pain or even before the pain appears.



- Morton's Neuroma: A thickened, irritated nerve between the 3rd and 4th digit.



_____ is a foot type where the second digit is longer than the Hallux.

- A. Oblique Forefoot
- B. Morton's Neuroma
- C. Digitorum Longus
- D. Morton's Toe



_____ is a foot type where the second digit is longer than the Hallux.

- A. Oblique Forefoot
- B. Morton's Neuroma
- C. Digitorum Longus
- D. **Morton's Toe**

- Morton's Toe is a common forefoot disorder where the second toe is longer than the Hallux. Morton's toe leads to excessive pressure on the second metatarsal head resulting in pain similar to the discomfort associated with metatarsalgia



An twelve year old male complains of heel pain on exercise, especially running and jumping. The diagnosis is calcaneal apophysitis. This is also known as:

- A. Reiter's Syndrome
- B. Kohler's Disease
- C. Sever's Disease
- D. Haglund's Deformity

An twelve year old male complains of heel pain on exercise, especially running and jumping. The diagnosis is calcaneal apophysitis. This is also known as:

- A. Reiter's Syndrome
- B. Kohler's Disease
- C. **Sever's Disease**
- D. Haglund's Deformity

- Sever's disease is a condition that affects growing adolescents, usually between the ages of 9 to 14 years old. Adolescents who have Sever's disease experience pain in one or both of their heels when walking.



Hyperextension of the 1st MTPJ is commonly known as:

- A. Turf Toe
- B. Morton's Toe
- C. Metatarsalgia
- D. Hallux rigidus



Hyperextension of the 1st MTPJ is commonly known as:

- A. **Turf Toe**
- B. Morton's Toe
- C. Metatarsalgia
- D. Hallux rigidus

- Turf toe: Hyperextension of the 1st MTPJ



Plantar Fasciitis may be caused by:

- A. Heel spurs
- B. Overuse
- C. Obesity
- D. All of these.



Plantar Fasciitis may be caused by:

- A. Heel spurs
- B. Overuse
- C. Obesity
- D. All of these.**



- The most common cause of deep pain on the bottom surface of the heel, is *plantar fasciitis* (inflammation of the plantar fascia).
- The plantar fascia is a broad band of fibrous tissue which runs along the bottom surface of the foot, from the heel to the toes. It helps to secure the arch.
- Long standing inflammation causes the deposition of calcium at the point where the inserts into the heel bone.
- This results in the appearance of a bony *heel spur* on x-ray. The spur itself is not the source of the pain.
- Plantar fasciitis may also present as pain anywhere along the sole of the foot, particularly along the arch and just in front of the heel.

- The Plantar Fascia

Plantar Fascia



A metatarsal bar is placed:

- A. distal to the metatarsal heads
- B. proximal to the metatarsal heads
- C. under the metatarsal heads
- D. anterior to the heel

A metatarsal bar is placed:

- A. distal to the metatarsal heads
- B. proximal to the metatarsal heads**
- C. under the metatarsal heads
- D. anterior to the heel



- Met Bar: Any bar of rubber, leather, or synthetic material applied transversely across the bottom of the shoe sole, with the apex immediately proximal to the metatarsal heads.



A pigeon toe wedge is a _____ wedge designed to turn the foot _____.

- A. medial, inward
- B. medial, outward
- C. lateral, inward
- D. lateral, outward



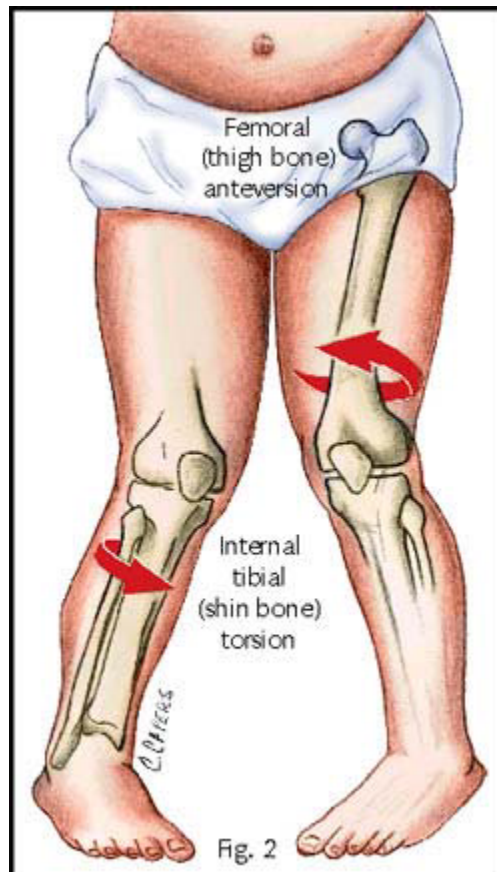
A pigeon toe wedge is a _____ wedge designed to turn the foot _____.

- A. medial, inward
- B. medial, outward
- C. lateral, inward
- D. **lateral, outward**

- Just kidding...



- One or a combination of three processes most commonly cause in-toeing: metatarsus adductus, internal tibial torsion, and femoral anteversion.



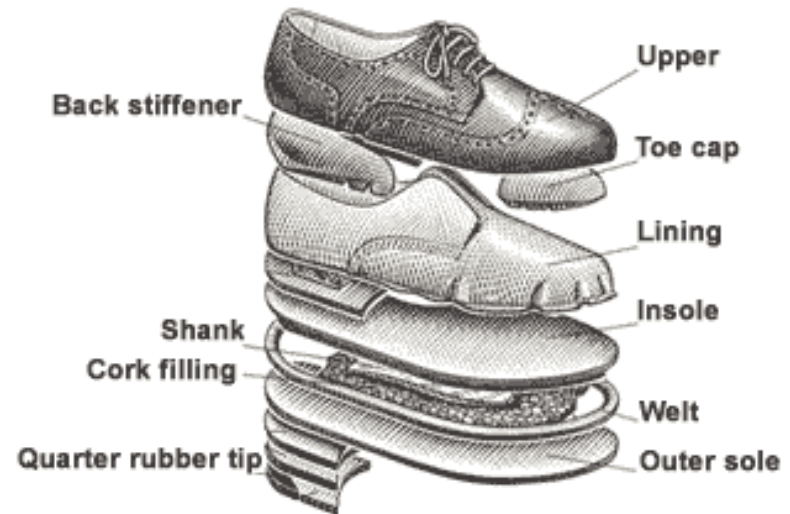
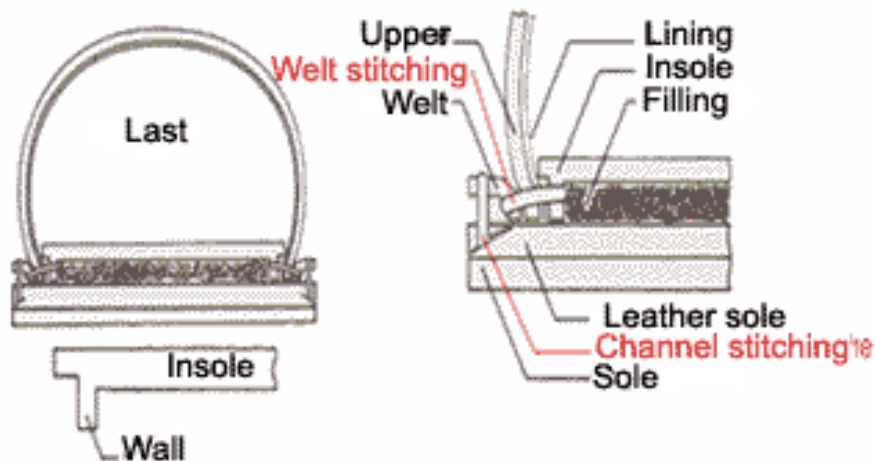
Which of the following describes a Goodyear Welt:

- A. Modification of a rubber sole with a denser material
- B. Material glued to the heel to accommodate a limb length discrepancy
- C. Represents the firm, stiff portion of the shoe between heel and ball of the shoe
- D. Material stitched in place to join shoe upper to the inner and outer sole

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- C. Represents the firm, stiff portion of the shoe between heel and ball of the shoe
- D. Material stitched in place to join shoe upper to the inner and outer sole**

- Goodyear Welt: Shoemaking process in which a narrow strip of leather or other material is stitched in place to join the shoe upper to the inner and outer sole.



The part of the shoe that covers the toe area is called the:

- A. quarter
- B. counter
- C. tongue
- D. vamp



The part of the shoe that covers the toe area is called the:

- A. quarter
- B. counter
- C. tongue
- D. **vamp**

- Vamp: Forepart of the shoe upper over the metatarsal shafts.



Four irons is equal to what fraction of an inch?

- A. $1/12$
- B. $1/24$
- C. $1/48$
- D. $1/60$



Four irons is equal to what fraction of an inch?

A. **1/12**

B. 1/24

C. 1/48

D. 1/60



- Iron: Term used to describe the measure of thickness of leather commonly used for soles.
- One iron = $\frac{1}{48}$ of an inch.
- For example, six-iron sole is $\frac{1}{8}$ inch thick.

Stitch down welt construction consists of:

- A. sewing the vamp directly to the midsole
- B. sewing the welt through the vamp and attaching it to the innersole
- C. cementing the vamp to the innersole and sewing with a McKay stitcher
- D. sewing the vamp directly to the quarter



Stitch down welt construction consists of:

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A stitch down welt construction consists of sewing the vamp directly to the midsole.



A combination last is a last that:

- A. works as a shoe or boot last
- B. works as a depth or super depth last
- C. has a heel size 2 to 3 widths narrower than the ball in exact proportions
- D. can be used for men's or women's sizes

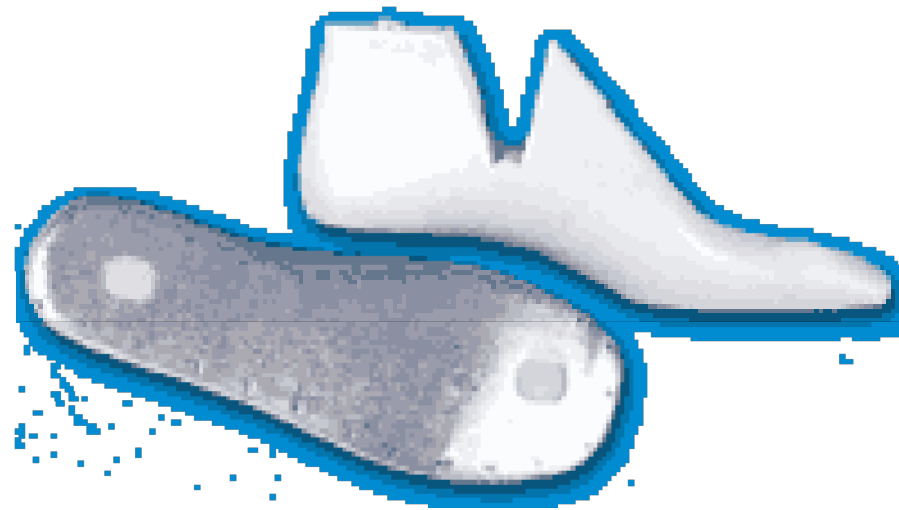


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- Combination Last: A last that deviates from standard proportions; the heel is two to three widths narrower than the ball in exact proportions.



A toe crest relieves pressure from the:

- A. distal end and plantar surface of the toes and metatarsal heads
- B. lateral side of the hallux
- C. dorsum of the metatarsal heads
- D. medial side of the hallux



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- Toe Crest: A convex cushion under the sulcus.



The posterior end of a metatarsal bar should be:

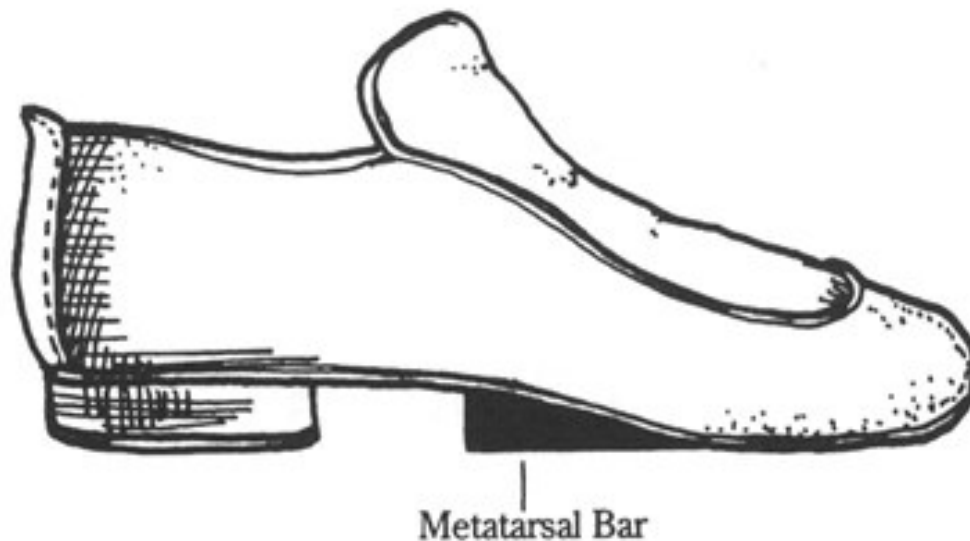
- A. no more than 1/4" high
- B. no more than 1/8" high
- C. no more than 1/2" high
- D. the same height as the anterior end of the heel



The posterior end of a metatarsal bar should be:

- A. no more than 1/4" high
- B. no more than 1/8" high
- C. no more than 1/2" high
- D. the same height as the anterior end of the heel**

- Any bar of rubber, leather, or synthetic material applied transversely across the bottom of the shoe sole, with the apex immediately proximal to the metatarsal heads.



Heel and sole flares can be added to:

- A. relieve pressure on the metatarsal heads
- B. lift the lateral edge of the foot
- C. lift the medial edge of the foot
- D. widen the base of support



Heel and sole flares can be added to:

- A. relieve pressure on the metatarsal heads
- B. lift the lateral edge of the foot
- C. lift the medial edge of the foot
- D. widen the base of support**

- Flares: Widen the base of support



A foot can be measured most effectively for shoe size from heel to ball with a:

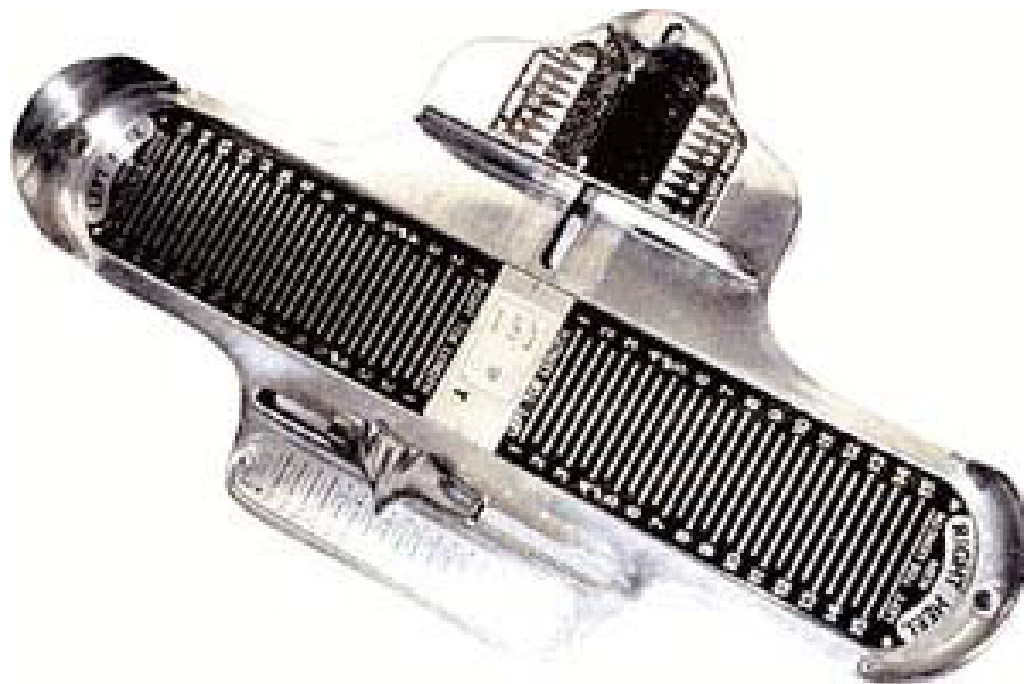
- A. Brannock device
- B. Ritz stick
- C. pedograph
- D. measuring tape



A foot can be measured most effectively for shoe size from heel to ball with a:

- A. **Brannock device**
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- All adult models incorporate the same three functional aspects, heel-to-toe, arch, and width measurements. These three measurements are critical for properly fitted footwear.



Shoes of one full size in length differ by what fraction of an inch?

A. $\frac{1}{6}$

B. $\frac{1}{8}$

C. $\frac{1}{3}$

D. $\frac{1}{4}$



Shoes of one full size in length differ by what fraction of an inch?

A. $1/6$

B. $1/8$

C. **$1/3$**

D. $1/4$



- A Barleycorn is an English unit of length equal to $\frac{1}{3}$ inch. Shoe size in the United States and Canada is based on the length of the last, measured in barleycorns, minus a constant.

$$\text{male shoe size} = \frac{\text{last length}}{\frac{1}{3} \text{ in}} - 22$$

$$\text{female shoe size (common)} = \frac{\text{last length}}{\frac{1}{3} \text{ in}} - 20.5$$

The heart size refers to:

- A. best selling sizes of shoes
- B. sizes of metatarsal pads
- C. most popular girth measurements of lasts
- D. the heart shape on the head of the talus



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The heart size refers to the best selling sizes of shoes.



For each progressive width size of a shoe the ball girth or volume measurement increases:

- A. $\frac{1}{3}$ inch
- B. $\frac{1}{4}$ inch
- C. $\frac{1}{16}$ inch
- D. $\frac{1}{8}$ inch

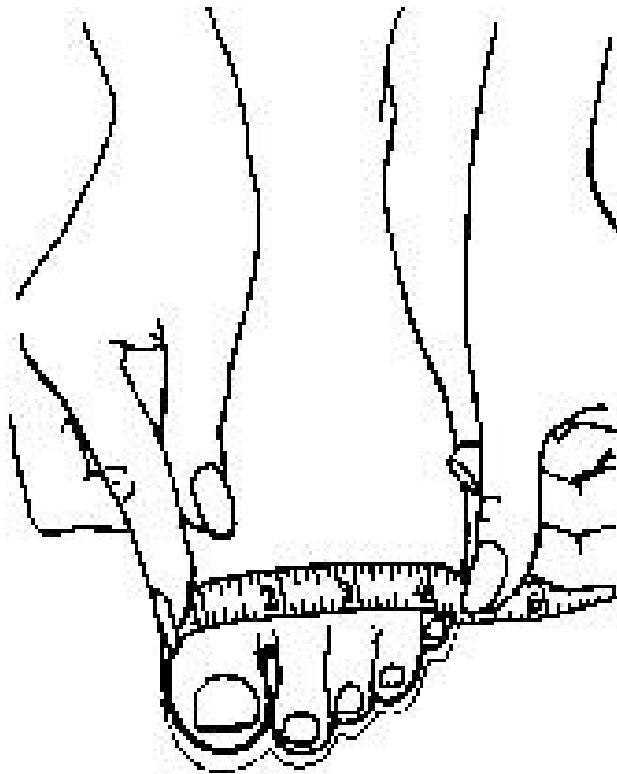


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- A. $\frac{1}{3}$ inch
- B. **$\frac{1}{4}$ inch**
- C. $\frac{1}{16}$ inch
- D. $\frac{1}{8}$ inch



- Widths are based upon the measurement around the ball of the foot.



The topline of the shoe needs to fit:

- A. Medial and lateral cuneiform
- B. Medial and lateral metatarsal
- C. Medial and lateral malleolus
- D. Medial and lateral cuboid



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- A. Medial and lateral cuneiform
- B. Medial and lateral metatarsal
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- Check topline fit on medial and lateral malleolus.



The waist measurement is located:

- A. Between the heel and arch
- B. Between the ball and instep
- C. Between the ball and toes
- D. Between the arch and instep

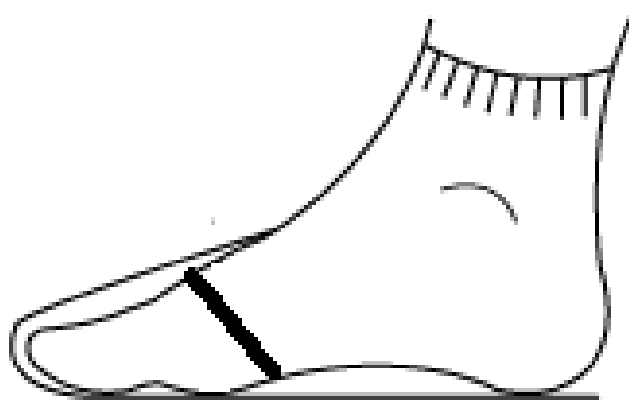


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- Waist measurement is located between the ball and instep



Heel height is measured from the:

- A. ground to the heel seat at the anterior edge of the heel
- B. ground to the heel seat of the back edge of the heel
- C. ground to the heel seat at the medial aspect of the heel
- D. ground to the dorsal edge of the heel cap

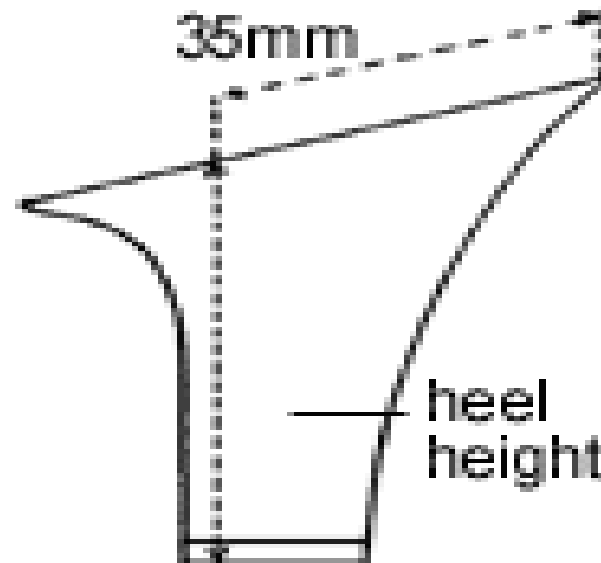


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- Heel Height: Vertical measurement from the plantar surface to the heel seat at the anterior or center surface of the heel, usually in eighths of an inch.



When fitting a shoe, the person says the toe feels too short. Yet, when you check, the shoe fits long enough. What may the problem be? 1. Toe box too shallow 2. Width too wide 3. Wrong last 4. There is no problem

- A. 1 & 2
- B. 1 & 3
- C. 4 only
- D. 2 & 3



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- Shoes are molded on different last styles. A size 7 molded on one last may not fit the same as a size 7 molded on a different style of last.



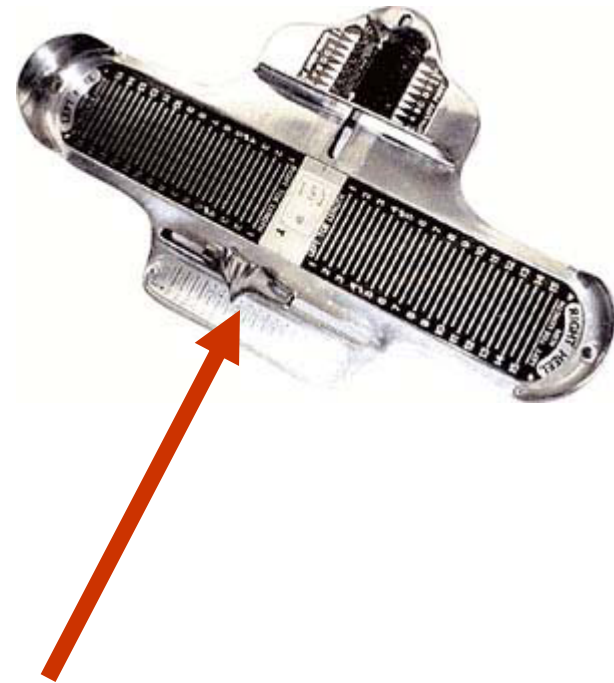
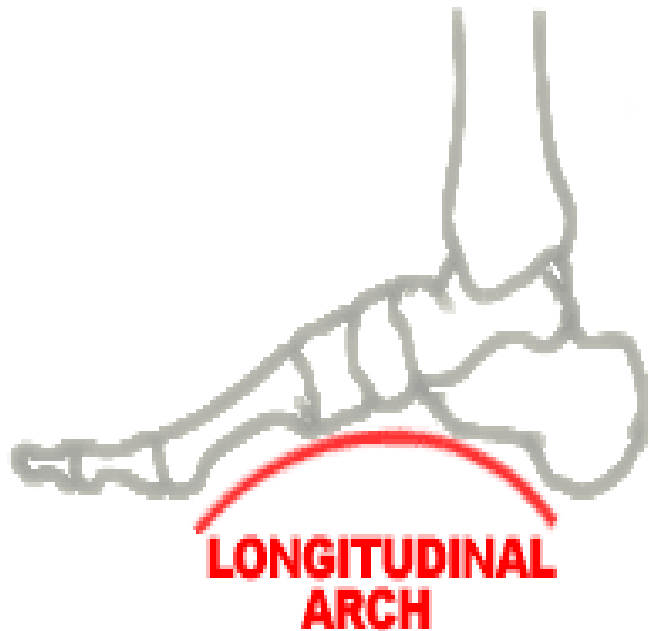
When fitting shoes arch length refers to the length of the shoe from:

- A. the heel to the 5th metatarsal head
- B. the heel to the 1st metatarsal head
- C. the length across the transverse arch at the ball of the foot
- D. the height from the floor to the navicular bone

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- Arch length refers to the length of the shoe from the heel to the 1st met head.



An oblique toe in a shoe is:

- A. more of a stylish toe style
- B. mitten shaped to provide more room
- C. more tapered at the toe on the dorsal side
- D. tapered at a more severe angle back towards the metatarsal heads

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- An oblique toe is a mitten shaped toe to accommodate a square forefoot.



Molding an orthosis to the patients foot with a heat source is referred to as:

- A. Positive Model Molding
- B. Negative Model Molding
- C. Vacuum Forming
- D. Direct Molding

Molding an orthosis to the patients foot with a heat source is referred to as:

- A. Positive Model Molding
- B. Negative Model Molding
- C. Vacuum Forming
- D. **Direct Molding**

Direct molding means to heat a Medicare approved prefabricated heat moldable insert using a heat source of at least 230 F and directly molding it to the patients foot.



Pre-fabricated foot orthotics are formed on a pre-constructed _____.

- A. last
- B. mold-block
- C. cast
- D. All of these



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- Pre-fabricated foot orthotics are mass-produced and sold over the counter pre-packaged or non-packaged.



Why are Prefabricated Foot Orthoses used?

- A. All of these.
- B. Easy plaster modification
- C. They fit feet out of the norm
- D. Quick & inexpensive



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- A. All of these.
- B. Easy plaster modification
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- Prefab Orthotics: Quick and Inexpensive, but not right for everyone



This type of orthosis acts to change impaired foot motion and re-establish normal foot function:

- A. Dynamic
- B. Functional
- C. Accommodative
- D. Static

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- B. **Functional**
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- Functional foot orthoses are used to correct abnormal foot function and, in so doing, also correct for abnormal lower extremity function.
- Some types of functional foot orthoses may also be designed to accommodate painful areas on the bottoms of the foot, just like accommodative foot orthoses.
- Functional foot orthoses may be made of flexible, semi-rigid or rigid plastic or graphite materials. They are relatively thin and easily fit into most types of shoes. They are fabricated from a three dimensional model of the foot which may be made by taking a plaster mold of the foot, stepping into a box of compressible foam, or scanning the foot with a mechanical or optical scanner.



- Functional Orthotics: A device designed to control an individual's lower-extremity biomechanical function by providing support or stability.



_____ materials are used to supplement and control foot function. They provide support while allowing flexibility. They may include 1/8" carbon fiber composites, Subortholene and similar plastics.

- A. Rigid
- B. Semi-rigid
- C. Accommodative
- D. Soft

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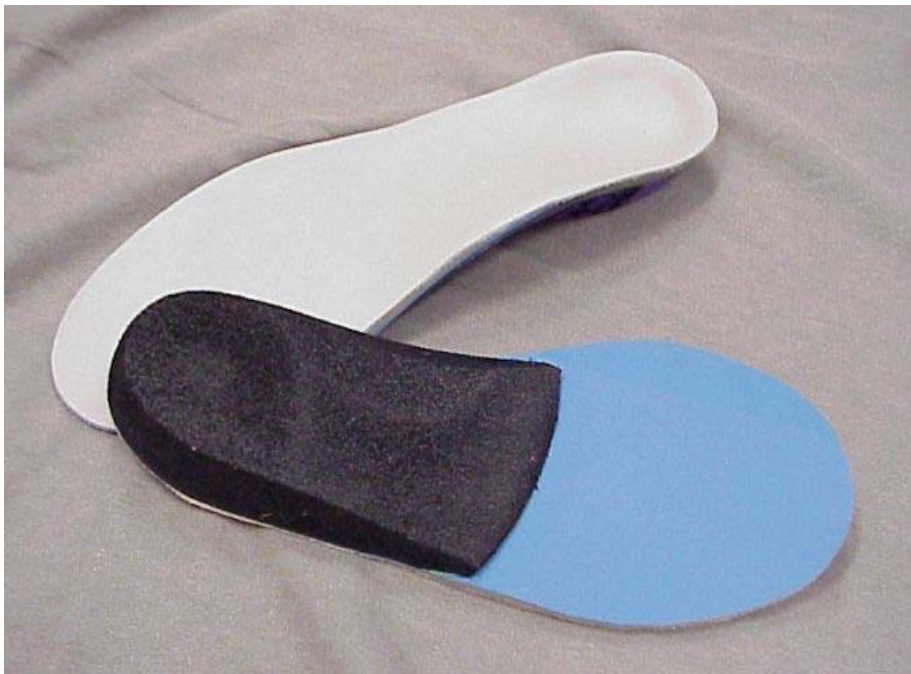
Accommodative materials are used to provide comfort, support and protection. They include;

- A. Carbon graphite
- B. Polypropylene
- C. Urethane foam
- D. Metal

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- A. Carbon graphite
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- Materials used for accommodative orthotics have a lower durometer than those used for functional orthotics. Thus, they are softer.



Accommodative prefabs are shaped to offload certain areas of the foot, and are used primarily for patients with:

- A. Achilles Tendonitis
- B. Posterior Tibial Tendon Dysfunction
- C. Metatarsalgia
- D. Calcaneal Valgus

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- Metatarsalgia occurs when the transverse arch relaxes, the long bone (metatarsal) heads are brought closer to the surface. This causes pressure.
- Painful calluses form over the pressure area.
- The softer materials used in accommodative orthotics help to cushion and protect the met heads, thus providing pain relief and the ability of the injured area to heal.

Functional prefabs are most often sized by:

- A. Arch length
- B. Impression foam casts
- C. Slipper casts
- D. Direct molding



Functional prefabs are most often sized by:

- A. **Arch length**
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- Functional Prefab with a heel post and a metatarsal pad



A Medicare approved prefabricated orthosis musty be heated for 30 seconds to 1 minute with a heat source of _____ degrees F or more.

- A. 180
- B. 210
- C. 230
- D. 350



A Medicare approved prefabricated orthosis musty be heated for 30 seconds to 1 minute with a heat source of _____ degrees F or more.

- A. 180
- B. 210
- C. **230**
- D. 350



- Multiple density pre-fabricated insert, direct formed, molded to foot after external heat source of 230 degrees Fahrenheit or higher, total contact with patient's foot, including arch, base layer minimum of $\frac{1}{4}$ inch material of shore a 35 durometer, or $\frac{3}{16}$ inch material of shore a 40 durometer (or higher)



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Fixed Costs include all of these EXCEPT:

- A. salaries
- B. inventory
- C. insurance
- D. rent



Fixed Costs include all of these EXCEPT:

- A. salaries
- B. **inventory**
- C. insurance
- D. rent



- A cost of labor, material or overhead that changes according to the change in the volume of production units.
- Combined with fixed costs, variable costs make up the total cost of production.
- While the total variable cost changes with increased production, the total fixed costs stays the same.



The _____ point is the point at which income matches expenditures.

- A. profit margin
- B. contribution margin
- C. break-even
- D. match

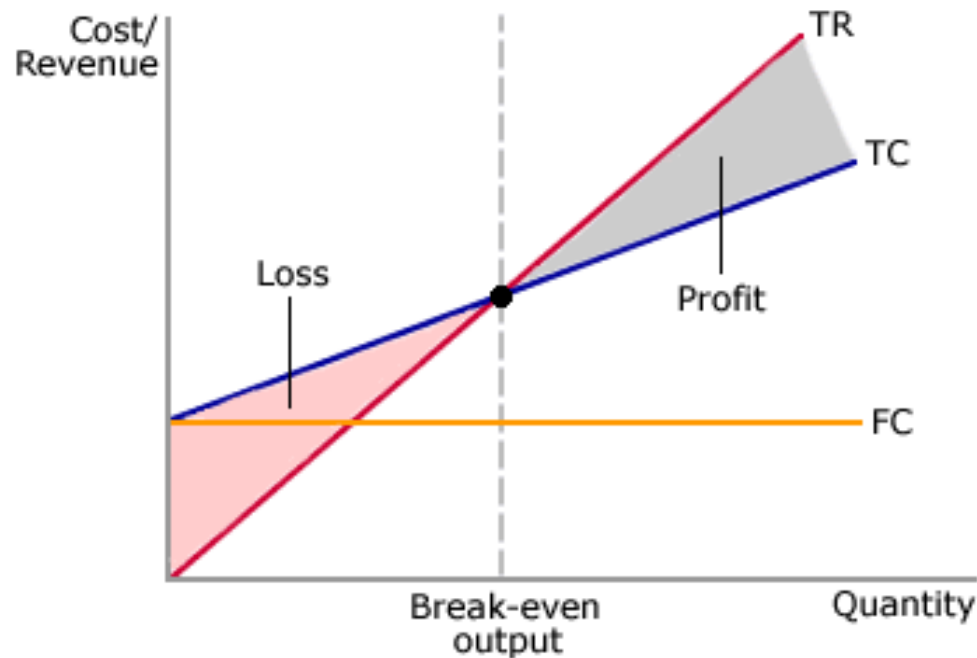


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- A calculation of the approximate sales volume required to just cover costs, below which production would be unprofitable and above which it would be profitable.



All Pedorthic Education programs now (or at the time of their renewal) need to comply to:

- A. ABC standards
- B. NCOPE standards
- C. BCP standards
- D. CAAHEP standards

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CAAHEP Podorthic Standards

- CAAHEP Standards were adopted in the 4th Quarter of 2019. Established NCOPE accredited programs will need to comply with the CAAHEP Podorthic Standards at the time of renewal.



Insurance required in the typical Podiatric facility includes:

- A. Professional liability
- B. Product Liability
- C. Property / Casualty
- D. All of these



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- A. Professional liability
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- Professional liability
 - Protection for services rendered
- Product Liability
 - Protection for devices dispensed
- Property / Casualty
 - Protection for Retail Storefront



_____ is/are the single most important source of HIV, HBV, and other blood borne pathogens in the occupational setting.

- A. Saliva
- B. Lunchrooms
- C. Restrooms
- D. Blood



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- D. **Blood**



- Although it is possible to contract HIV from the lunchroom or restroom in an occupational setting, it still requires contact (in some form or another) with blood. It is believed that contact with saliva is safe. However, contact with blood in any form is unsafe. It is possible for blood to be mingled with saliva on a microscopic level. So universal precautions should be used at all times when dealing with any body fluids.



_____ is the difference between planned purchases and stock already ordered.

- A. Inventory in stock
- B. Open to buy
- C. Pipeline inventory
- D. Profit margin



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- “Open to buy” is the dollar amount budgeted by a business for inventory purchases for a specific time period.



_____ is the costs of material loss due to theft or unexplained disappearances.

- A. Shrinkage
- B. Profit loss
- C. Wrappage
- D. Break-even



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- A. **Shrinkage**
- B. Profit loss
- C. Wrappage
- D. Break-even



- Shrinkage is inventory recorded on a company's books but not on hand, due to theft, loss or accounting error.



OSHA is the main federal agency charged with the enforcement of safety and health legislation.

- A. Occupational Safety and Health Administration
- B. Occupational Safety and Health Alliance
- C. Occupational Safety and Health Agency
- D. Occupational Safety and Health Association



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A. Occupational Safety and Health Administration

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- OSHA's mission is to assure the safety and health of America's workers by setting and enforcing standards; providing training, outreach, and education; establishing partnerships; and encouraging continual improvement in workplace safety and health.



Closed kinetic chain defines:

- A. Non-weightbearing; stance of gait
- B. Weightbearing; stance of gait
- C. Motion of the dorsiflexors
- D. All of these.



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- A. Non-weightbearing; stance of gait
- B. Weightbearing; stance of gait**
- C. Motion of the dorsiflexors
- D. All of these.



- The functional anatomical relationships that exist in the upper and lower extremities. The closed kinetic chain involves the weight bearing relationship between the foot, ankle lower leg, knee, thigh and hip. Weight-bearing; stance phase of gait cycle.

All of the following are functions of the foot
EXCEPT:

- A. Mobile adapter to the terrain
- B. Help to maintain body balance
- C. Gravity Reducer
- D. Torque converter

All of the following are functions of the foot
EXCEPT:

- A. Mobile adapter to the terrain
- B. Help to maintain body balance
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- The foot works as an organ for locomotion. It is a mobile adapter for the body above; it is used to absorb shock and to cushion various other joints or structures. It also functions at times (or not, in a variety of pathological states) as a rigid lever in the act of propulsion in walking or running.

What determines the difference between the walking gait and running gait is that in walking:

- A. Both feet are off the ground
- B. There is an absence of double support phase
- C. The length of swing phase time exceeds the length of stance phase time
- D. One foot is always in contact with the ground

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The longitudinal midtarsal joint axis provides for motion primarily in which plane?

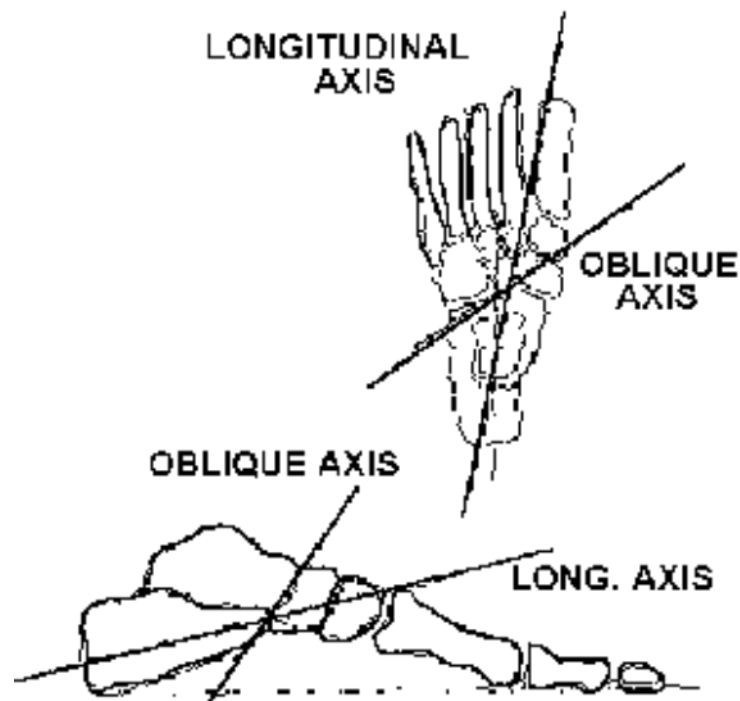
- A. frontal plane
- B. transverse plane
- C. horizontal plane
- D. sagittal plane



The longitudinal midtarsal joint axis provides for motion primarily in which plane?

- A. **frontal plane**
- B. transverse plane
- C. horizontal plane
- D. sagittal plane

- The longitudinal midtarsal joint axis provides for motion primarily in the frontal plane.



What motions allow the foot to adjust to various terrains and posture changes?

- A. Ankle dorsiflexion
- B. Midtarsal joint pronation
- C. Subtalar joint pronation
- D. All of these

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- A. Ankle dorsiflexion
- B. Midtarsal joint pronation
- C. Subtalar joint pronation
- D. All of these**

- The foot, via its structure, has the ability to adapt to various conditions, such as increased body weight and walking on uneven terrain.



At heel strike the calcaneus is:

- A. Everted
- B. Inverted
- C. Neutral
- D. All of these.



At heel strike the calcaneus is:

- A. Everted
- B. Inverted**
- C. Neutral
- D. All of these.



At heel strike the calcaneus is inverted.
At toe-off the calcaneus is everted.



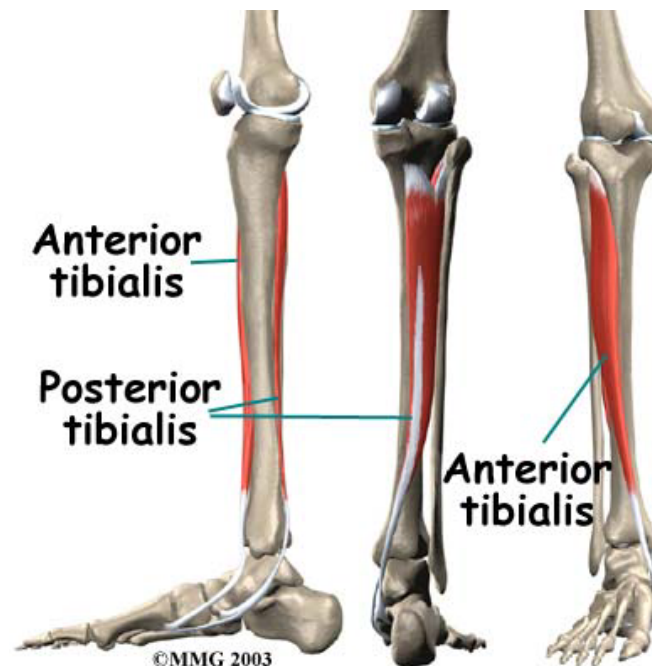
During the active propulsive phase of gait,
which is not a main stabilizer of the foot:

- A. Posterior tibialis and tibialis anterior
- B. Extensor hallucis longus
- C. Posterior tibialis and peroneus longus
- D. Flexor digitorum

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- C. Posterior tibialis and peroneus longus
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- The main muscle that dorsiflexes the foot originates on anterior of the tibia. It is called the *anterior tibialis*. The *posterior tibialis*, which plantarflexes and inverts the foot, originates along the posterior and medial edge of the tibia.



What is the durometer of medium plastazote?

- A. 15
- B. 20
- C. 25
- D. 35



What is the durometer of medium plastazote?

- A. 15
- B. **20**
- C. 25
- D. 35



Pink Plastazote (20 Durometer) is a high quality, lightweight, closed cell polyethylene foam that is non-allergenic. It may be used in direct contact with the skin. It is heat moldable, grindable and washable. Pink Plastazote molds quickly to the foot during weight bearing, enhancing total contact.



Allied Health Education

What is the durometer of Poron and PPT?

- A. 15
- B. 20
- C. 25
- D. 35



What is the durometer of Poron and PPT?

- A. **15**
- B. 20
- C. 25
- D. 35



Poron® is a versatile, 15 durometer, lightweight, open celled urethane. It is available: smooth, abraded on one side (abraded x 1), and abraded on both sides (abraded x 2). Genuine Poron is commonly acknowledged as the material of choice for shock absorption and resiliency. Poron® will not "bottom-out" with use. It is grindable and washable. Use Poron® + fabric as a top cover for foot orthoses or for insoles.



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The ultimate function of a foot orthosis is to:

- A. Decrease ground reaction forces upon the foot
- B. Align the calcaneus with the femur
- C. Allow end range motion
- D. Prevent the subtalar joint from unlocking



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- A. Decrease ground reaction forces upon the foot**
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Functional foot orthoses are used to correct abnormal foot function and, in so doing, also correct for abnormal lower extremity function. Some types of functional foot orthoses may also be designed to accommodate painful areas on the bottoms of the foot, just like accommodative foot orthoses. Functional foot orthoses may be made of flexible, semi-rigid or rigid plastic or graphite materials. They are relatively thin and easily fit into most types of shoes.



Characteristics of an accommodative orthosis may include all the following except:

- A. Utilized to attain precise biomechanical control
- B. Can dynamically mold or deform to the foot contours
- C. May include protective dell to accommodate osseous prominences
- D. Are comprised of softer versus rigid materials

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- D. Are comprised of softer versus rigid materials

Accommodative foot orthoses are used to cushion, pad or relieve pressure from a painful or injured area on the bottom of the foot. Accommodative orthoses may be made of a wide range of materials such as cork, leather, plastic foams, and rubber materials. They are generally more flexible and soft than functional foot orthoses.



A marathon runner with rigid cavus feet has knee pain. What may the problem be with her orthotics?

- A. Too hard
- B. Too soft
- C. Too short
- D. Not enough subtalar joint control



A marathon runner with rigid cavus feet has knee pain. What may the problem be with her orthotics?

- A. **Too hard**
- B. Too soft
- C. Too short
- D. Not enough subtalar joint control



- Muscle weakness is commonly associated with the pes cavus foot. Many patients with the presenting symptoms of pes cavus deformity suffer from a neuromuscular disease.



A patient complains her foot orthotic is digging into her met heads; the orthotic is probably:

- A. Too wide
- B. Too narrow
- C. Too short
- D. Too long



A patient complains her foot orthotic is digging into her met heads; the orthotic is probably:

- A. Too wide
- B. Too narrow
- C. Too short
- D. **Too long**

- The distal border of a $\frac{3}{4}$ length orthotic should end proximal to the metatarsal heads.



You dispense a shock absorbing foot orthotic, and it is returned after two weeks because the top of the insert is bottoming out. To cure the problem you replace the top cover with:

- A. Polyurethane foam
- B. Polyethylene foam
- C. Latex foam
- D. Subortholene



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- B. Polyethylene foam
- C. Latex foam
- D. Subortholene



- Polyethylene foams conform and cushion, but bottom out quickly. It is used primarily for diabetic and arthritic patients as a top cover.
- Polyurethane foams conform and cushion less but resists bottoming out. It is used as a top cover for general use.
- Subortholene is a hard, thermoformable plastic made up of polyethylene and polyurethane. It is primarily used for UCBL's.

A foot with a decreased medial arch is referred to as:

- A. pes planus
- B. pes valgus
- C. pes varus
- D. pes cavus

A foot with a decreased medial arch is referred to as:

- A. **pes planus**
- B. pes valgus
- C. pes varus
- D. pes cavus

- Pes Planus: Congenital or inherited flat foot, usually inherited and abnormal.



Sever's disease is also known as:

- A. calcaneal apophysitis
- B. Reiter's Syndrome
- C. retrocalcaneal bursitis
- D. plantar fasciitis



Sever's disease is also known as:

A. calcaneal apophysitis

B. Reiter's Syndrome

C. retrocalcaneal bursitis

D. plantar fasciitis



- Sever's disease is a traction apophysitis of the Achilles tendon insertion at the calcaneus. It is the most common cause of heel pain in the growing athlete and the second most common osteochondroses of both sexes.



A patient presents with a diagnosis of Charcot arthropathy. She has:

- A. Neuropathy
- B. Arthritis
- C. Sciatica
- D. Hemiplegia



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- C. Sciatica
- D. Hemiplegia



- Charcot foot is the term given to neurogenic arthropathy that affects the joints in the foot. Neurogenic arthropathy is a rapidly progressive degenerative arthritis that results from damaged nerves (neuropathy). In Charcot foot, pain perception and the ability to sense the position of the joints in the foot are severely impaired or lost, and muscles lose their ability to support the joint (s) properly.



- Loss of these motor and sensory nerve functions allow minor traumas such as sprains and stress fractures to go undetected and untreated, leading to ligament laxity (slackness), joint dislocation, bone erosion, cartilage damage, and deformity of the foot. The bones most often affected are the metatarsals and the tarsals, located in the forefoot and midfoot, respectively.

Freiberg's Infraction affects which metatarsal most commonly:

- A. First metatarsal
- B. Second metatarsal
- C. Third metatarsal
- D. Fourth metatarsal

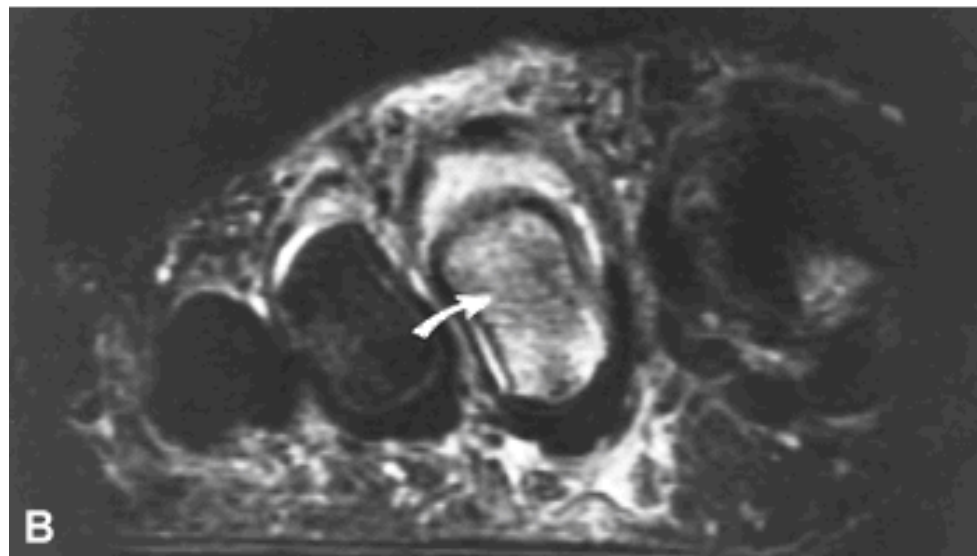
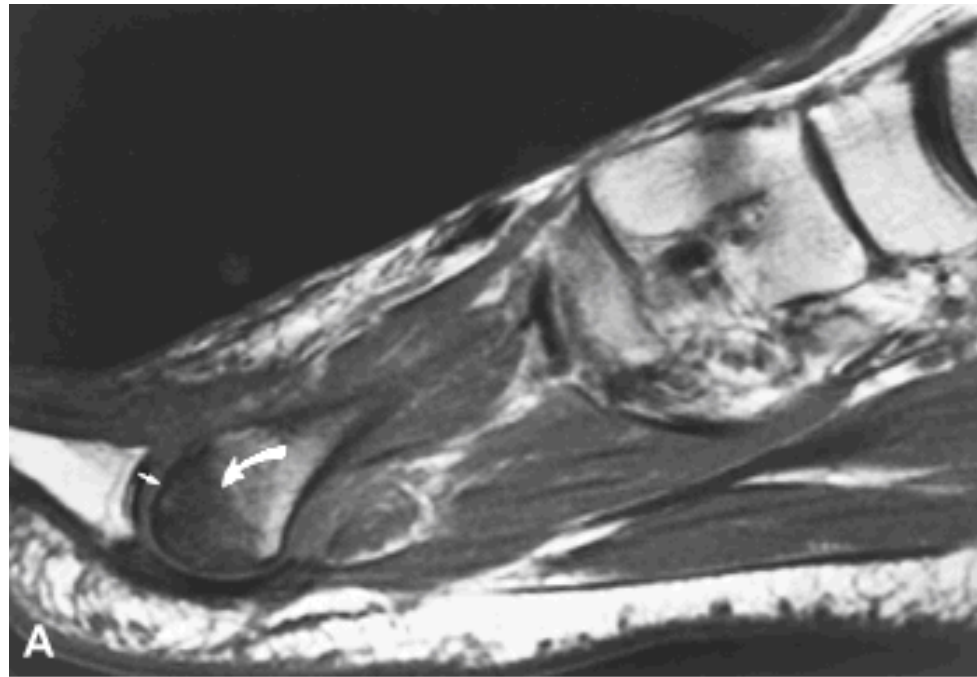


Freiberg's Infraction affects which metatarsal most commonly:

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- B. **Second metatarsal**
- C. Third metatarsal
- D. Fourth metatarsal



- Freiberg's Infraction is a condition specific to the lesser metatarsal heads, most commonly the second metatarsal. This condition results in a focal loss of blood supply to the metatarsal head. Freiberg's Infraction occurs at the metaphysis of the bone in a region where the primary or nutrient artery of the bone supplies the distal metatarsal. The result is a collapse of the metatarsal head.



Shin splints are most commonly found on what aspect of the tibia:

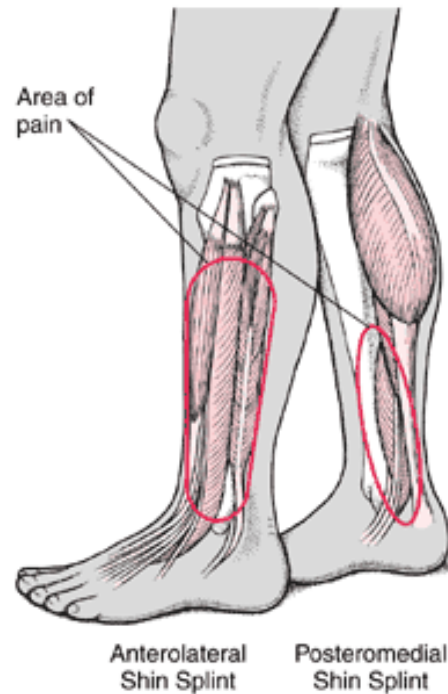
- A. Posterolateral
- B. Posteromedial
- C. Anteromedial
- D. Anterolateral



Shin splints are most commonly found on what aspect of the tibia:

- A. Posterolateral
- B. Posteromedial
- C. Anteromedial
- D. **Anterolateral**

- **Anterolateral shin splints** affect the anterior muscles and lateral parts of the shin. This type of injury results from a natural imbalance in the size of opposing muscles.



Kohler's disease affects which bone in the foot:

- A. Third metatarsal
- B. Talus
- C. Calcaneus
- D. Navicular

Kohler's disease affects which bone in the foot:

- A. Third metatarsal
- B. Talus
- C. Calcaneus
- D. Navicular**

- Kohler's disease is a condition, where the navicular bone in the foot undergoes avascular necrosis. For some unknown reason, typically in a child, the navicular bone in the foot loses its blood supply for a while. The affected foot usually has typical findings of a dense flattened navicular bone, compared to the normal foot. Treatment may consist of a walking cast if the pain is severe, or an UCBL arch support if the pain is less so. Can be unilateral or bilateral.



CFS

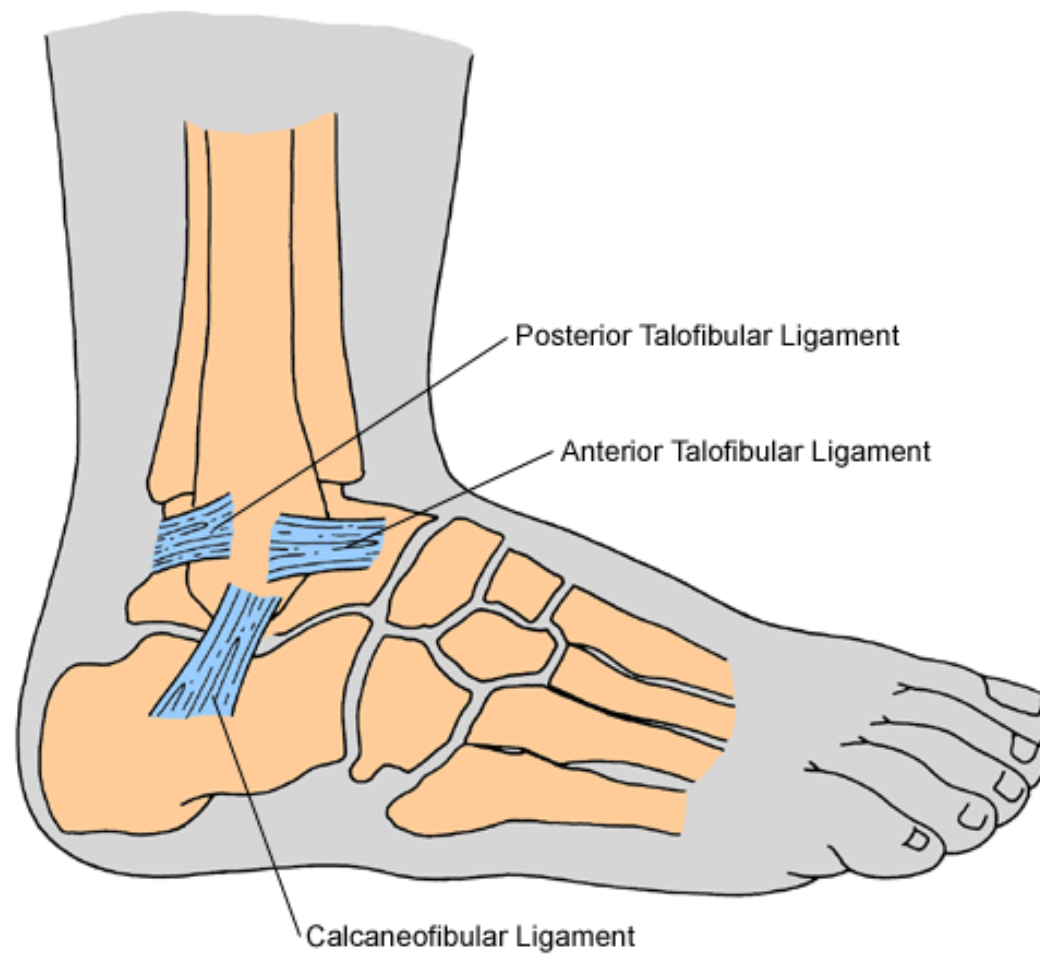
Allied Health Education

The most common ankle injury in sports is the inversion injury with sprain of the:

- A. anterior talofibular ligament
- B. a complex of 3 ligaments
- C. a ligament on the lateral side of the foot attaching the cuboid and the fifth metatarsal
- D. a ligament unassociated with the foot

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Normal range of motion of the ankle in dorsiflexion is:

- A. 50 degrees
- B. 30 degrees
- C. 10 degrees
- D. 17 degrees

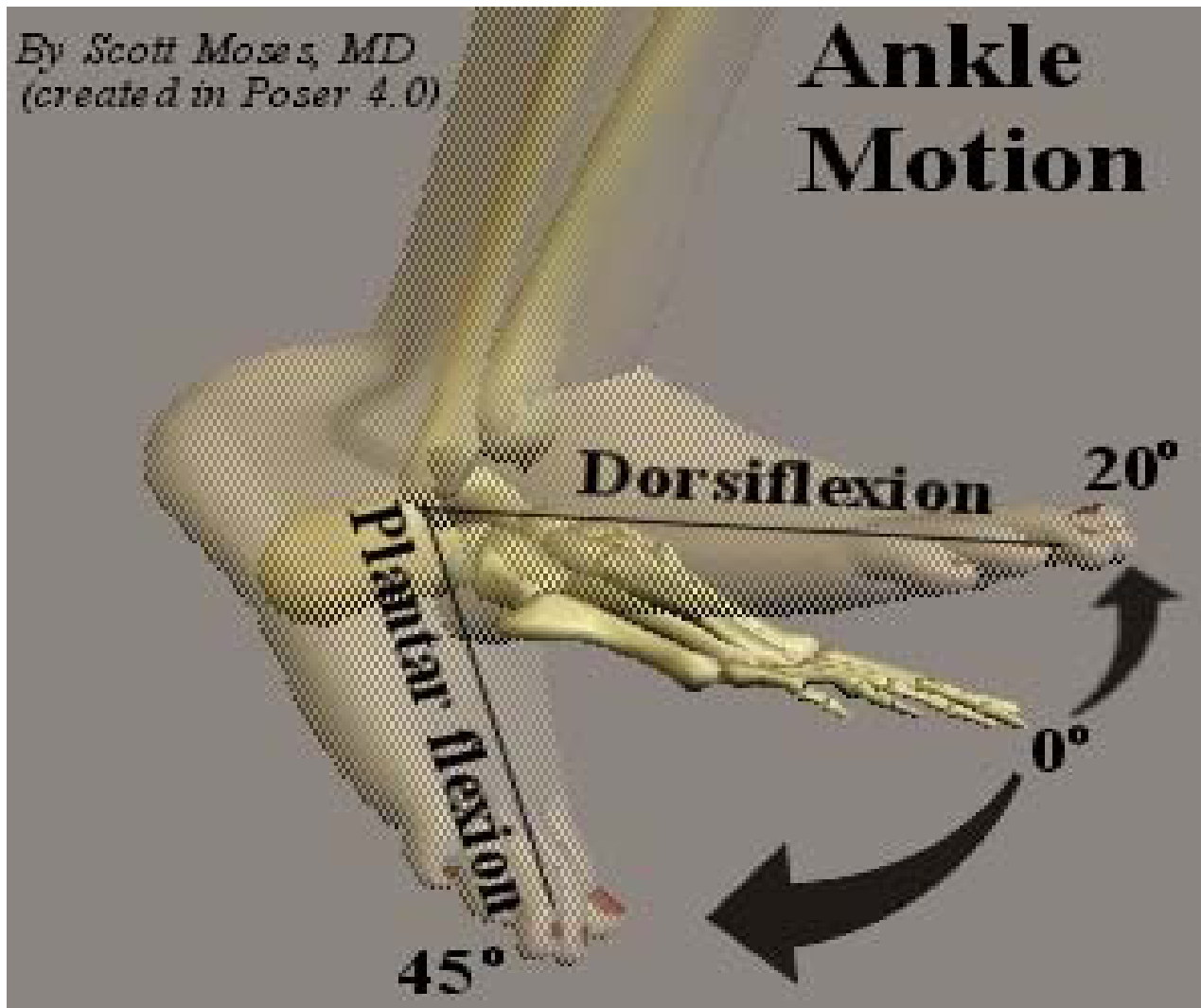


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- B. 30 degrees
- C. **10 degrees**
- D. 17 degrees

*By Scott Moses, MD
(created in Poser 4.0)*

Ankle Motion



CFS

Allied Health Education

If the heel of the foot during weight bearing was fixed and tilting toward the midline of the body it would be referred to as:

- A. varus
- B. valgus
- C. everted
- D. neutral

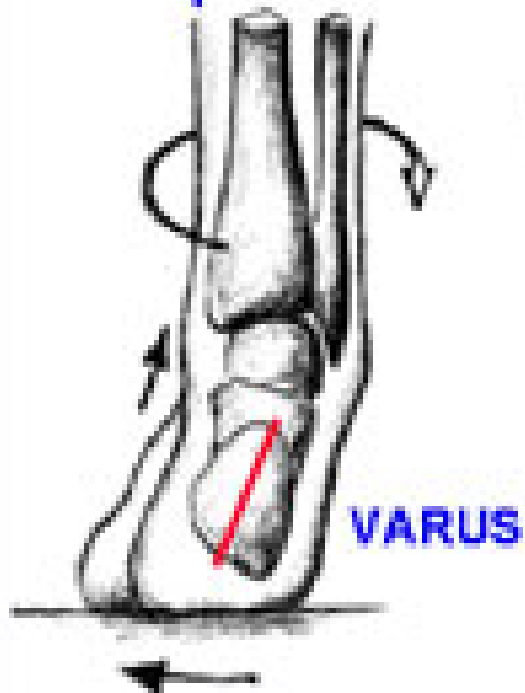
If the heel of the foot during weight bearing was fixed and tilting toward the midline of the body it would be referred to as:

- A. varus**
- B. valgus
- C. everted
- D. neutral

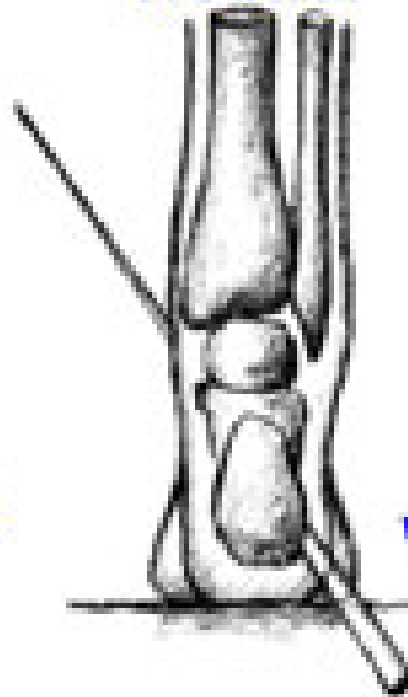
Neutral Position

RIGHT LEG - LOOKING AT BACK OF HEEL

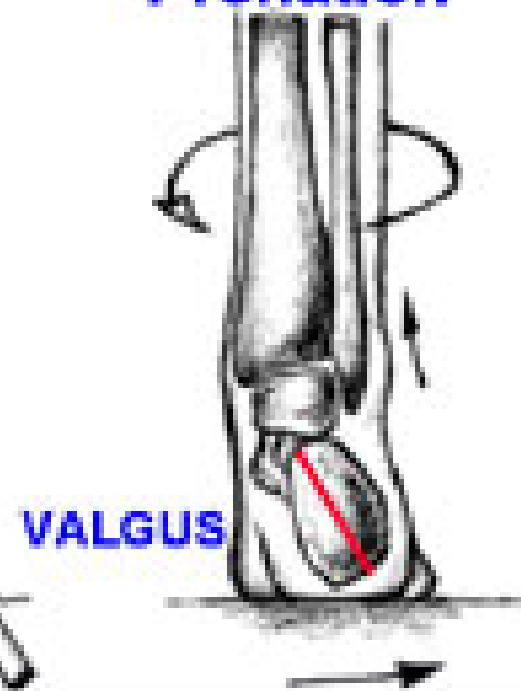
Supination



Neutral



Pronation



CFS

Allied Health Education

Which of the following arteries can be palpated in the foot to help determine the patient's vascular status?

- A. Dorsalis pedis pulse
- B. Saphenous pulse
- C. Posterior Tibial pulse
- D. Both A and C

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- D. **Both A and C**



Dorsalis pedis



Posterior tibial

Semmes-Weinstein monofilament is used to check for:

- A. Ankle dorsiflexion
- B. Neuropathy
- C. Diabetes
- D. Circulation

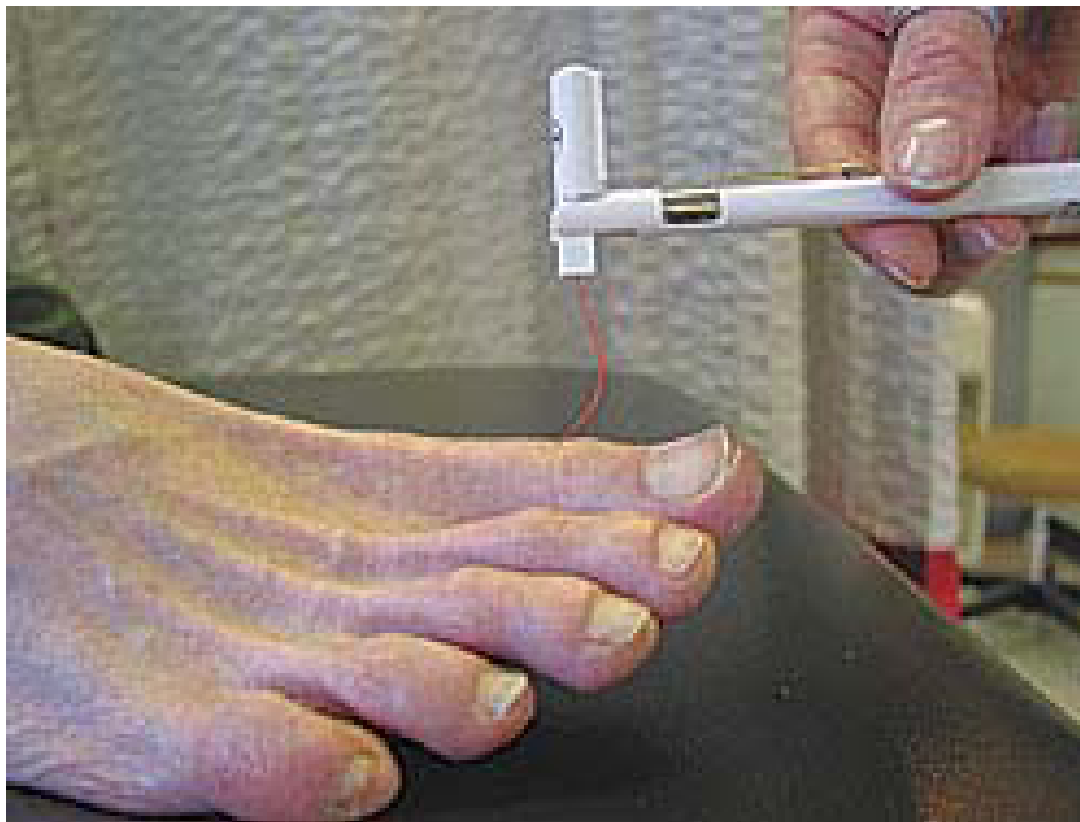


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- A. Ankle dorsiflexion
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- C. Diabetes
- D. Circulation



- Semmes-Weinstein 10 gram monofilament sensory test.



The measurement of the Semmes-Weinstein monofilament used to produce 10 grams of force is:

- A. 4.07
- B. 5.07
- C. 6.07
- D. 7.07



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- B. **5.07**
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- The 5.07 10 gram Semmes-Weinstein type monofilament has been adopted for screening of diabetic patients in an effort to prevent injury loss of protective sensation in the foot and reduce amputations.



Semmes-Weinstein Monofilaments

Flameless Color	Log Scale Value	Force Applied	Sensory Level
Green	2.83	.05 gm	Normal
Blue	3.61	0.2 gm	Diminished Light Touch
Purple	4.31	2.0 gm	Diminished Protective Sensation
Red	4.56	4.0 gm	Loss of Protective Sensation
Red/Orange	6.65	300 gm	Residual Deep Pressure

Metatarsus adductus is characterized by:

- A. A triangular shaped foot
- B. Pronated triangular foot
- C. High arched foot, common “C” shaped foot which pronates
- D. High arched foot, “Comma” shaped foot which supinates



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- B. Pronated triangular foot
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- Metatarsus Adductus is a deformity in which there is medial displacement or angulation of the metatarsals. This condition is commonly treated by casting and manipulation of the affected area, followed by bracing of the extremity for several months.



Ankle motion occurs primarily in which of the following planes?

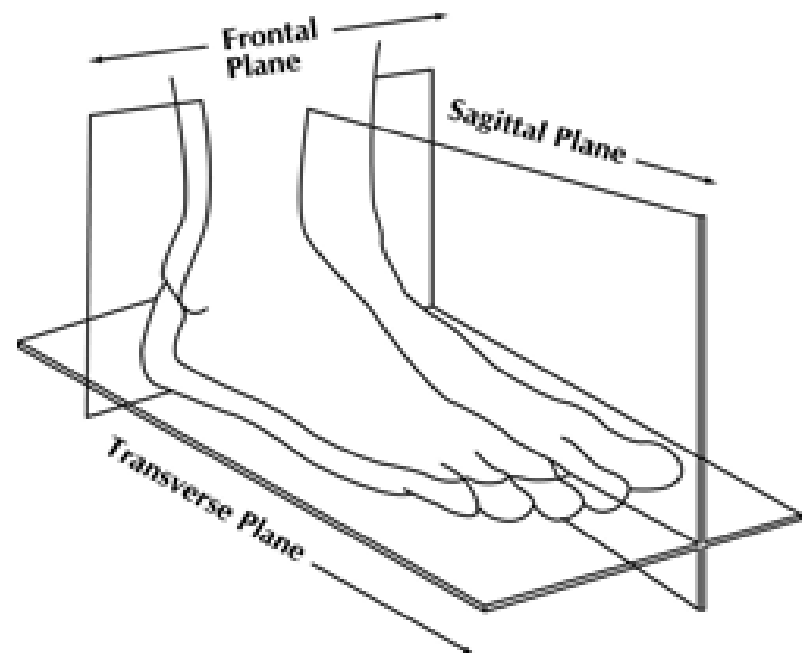
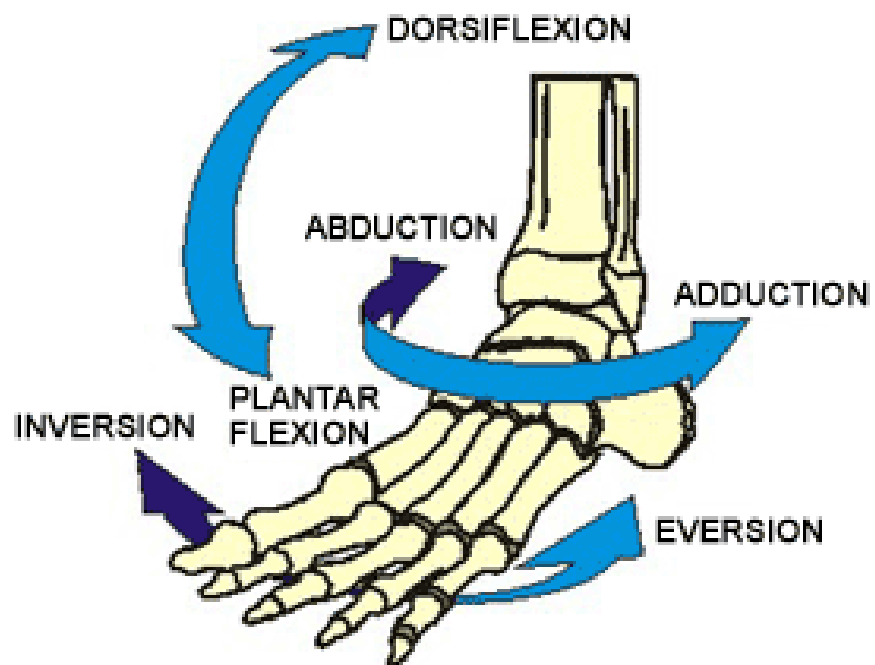
- A. Sagittal
- B. Frontal
- C. Transverse
- D. All of these.



Ankle motion occurs primarily in which of the following planes?

- A. **Sagittal**
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- C. Transverse
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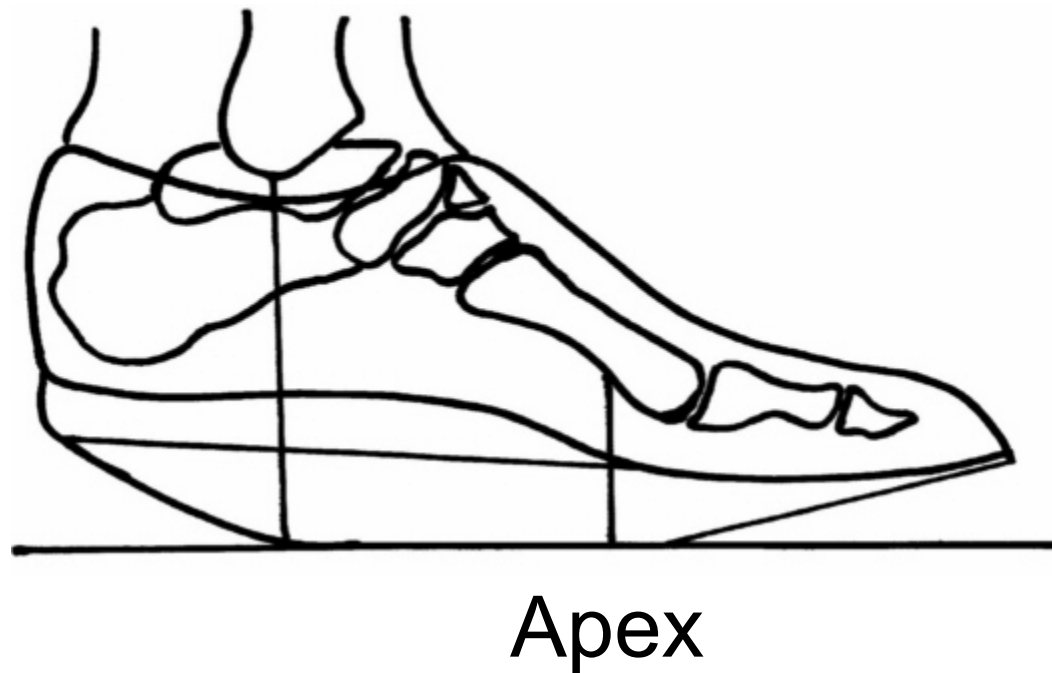
A patient presents with pain at the metatarsal heads during the propulsive phase of gait. The apex of a rocker should be placed in which of the following locations for this patient?

- A. distal to the metatarsal heads
- B. proximal to the metatarsal heads
- C. under the metatarsal heads
- D. anterior to the heel

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- The apex of a rocker should be placed proximal to the met heads.



Which of the following is most appropriate for a rigid foot and ankle?

- A. long vamp
- B. functional orthosis
- C. flexible sole
- D. SACH modification



Which of the following is most appropriate for a rigid foot and ankle?

- A. long vamp
- B. functional orthosis
- C. flexible sole
- D. **SACH modification**



- Solid Ankle Cushioned Heel. A softer durometer material replacing a portion of the posterior heel base. SACH heels reduce shock at heel strike and compensate for the absence of ankle motion.



Reference: Apis Footwear Modification Guide

A young man comes into your facility with a prescription stating that he has genu varum and the foot is supinated and limited to rigid in motion. The prescription calls for sole and heel wedges but instructs you to place them where needed. Where should they be placed?

- A. lateral sole wedge and medial heel wedge
- B. medial sole and heel wedge
- C. lateral sole and heel wedge
- D. medial sole wedge and lateral heel wedge



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- B. **medial sole and heel wedge**
- C. lateral sole and heel wedge
- D. medial sole wedge and lateral heel wedge



Reference: Apis Footwear Modification Guide

A person presents with a prescription that says evaluate and treat. The patient demonstrates lateral instability. What shoe modification would be appropriate?

- A. rocker sole
- B. medial sole flare
- C. lateral sole flare
- D. reinforced counter



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- C. **lateral sole flare**
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- Lateral instability calls for a wider base of support. A lateral flare would give the patient greater stability.



The Mayo and Crescent bars differ from other metatarsal bars in that they:

- A. are straight at their anterior end
- B. are placed distal to the metatarsal heads
- C. are used only inside the shoe
- D. are curved at the anterior end

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Crescent Metatarsal Bar



Reference: Apis Footwear Modification Guide

A Thomas bar is how wide from the anterior edge to the posterior edge:

- A. 2 inches
- B. $1\frac{1}{4}$ inches
- C. $\frac{3}{4}$ inches
- D. 4 inches

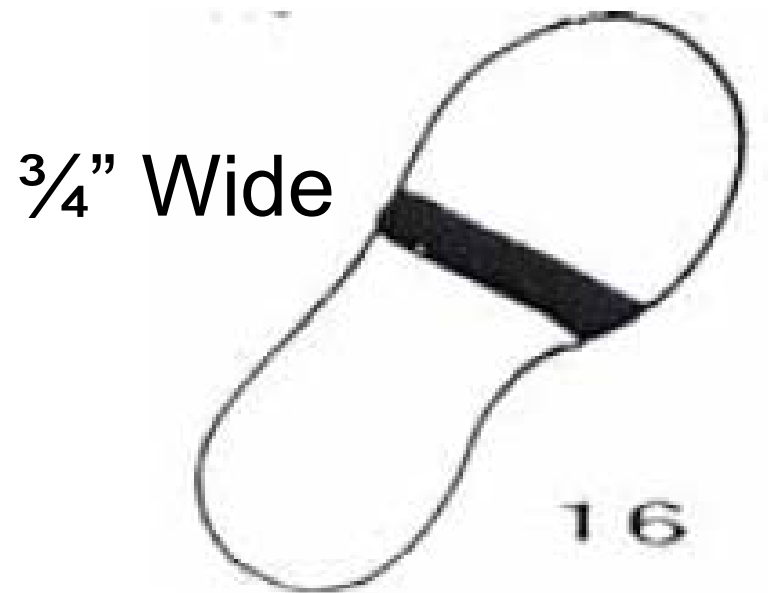


A Thomas bar is how wide from the anterior edge to the posterior edge:

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Thomas Metatarsal Bar



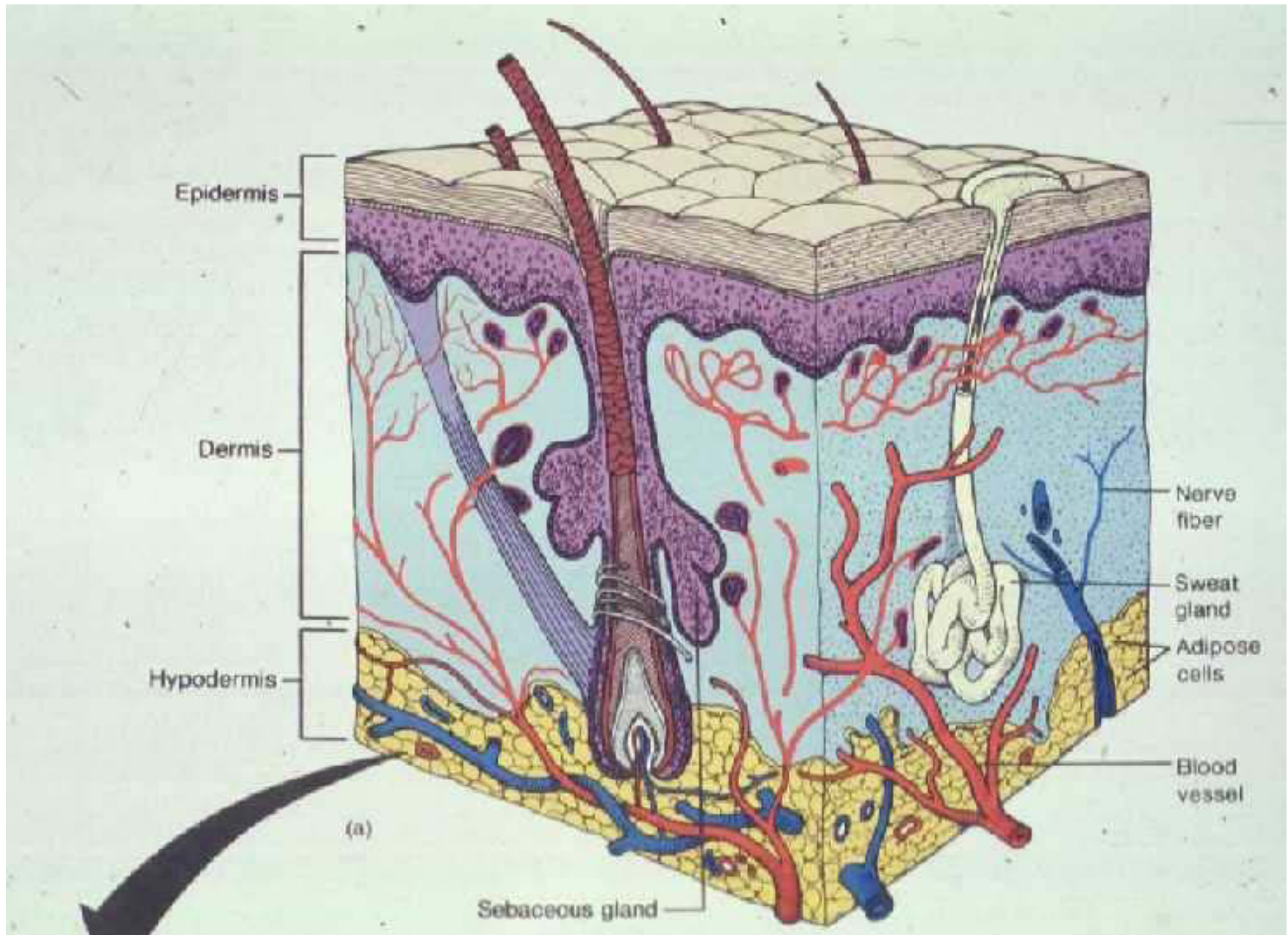
Reference: Apis Footwear Modification Guide

The dermis contains all below except:

- A. Dead epithelial cells
- B. Sweat glands
- C. Sebaceous glands
- D. Capillary blood vessels

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The myelin sheath functions to:

- A. Insulate a neuron
- B. Isolate a neuron
- C. Accelerate transmission
- D. All of these.



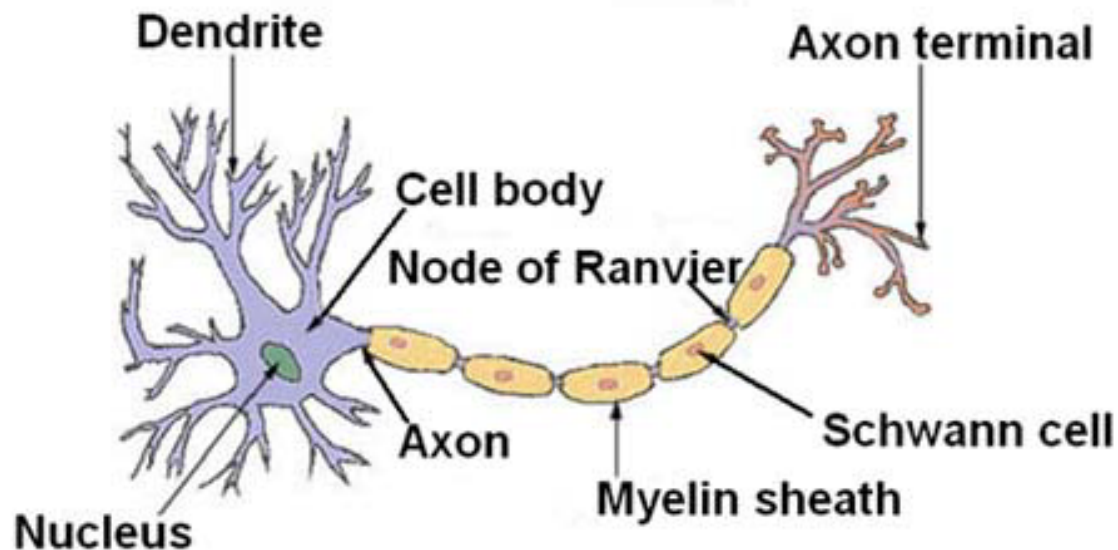
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- B. Isolate a neuron
- C. Accelerate transmission
- D. All of these.**



- The main function of a myelin *sheath* is an increase in the speed at which impulses propagate along the *myelinated* fiber. Secondly, it isolates and insulates the nerve fiber from other nerve fibers.

Structure of a Typical Neuron



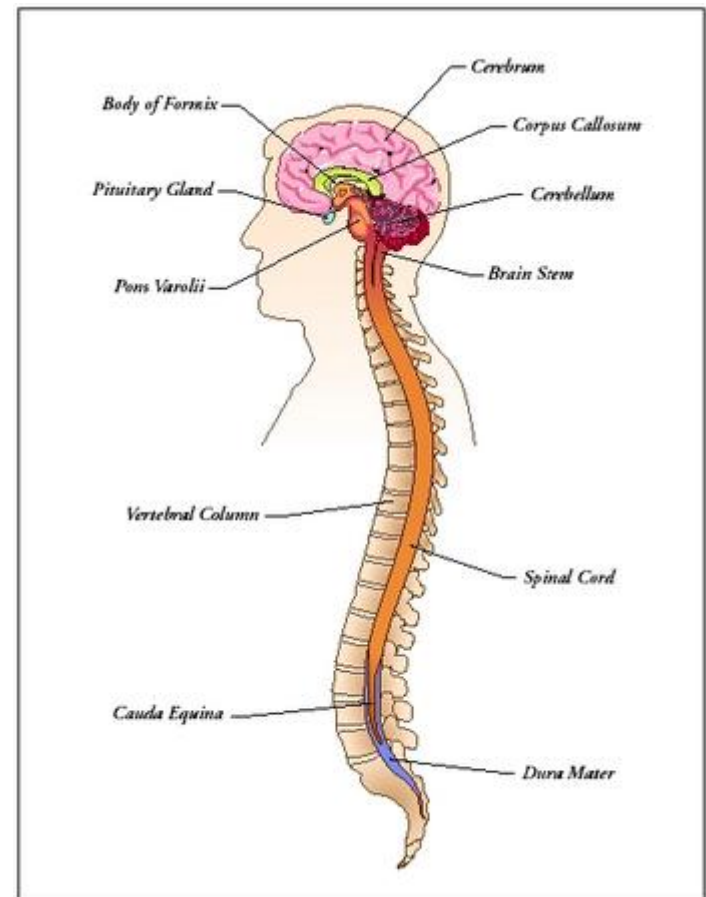
The two main components of the central nervous system are:

- A. Cranial and peripheral nerves.
- B. Spinal cord and autonomic ganglia.
- C. Brain and spinal cord
- D. Brain and its blood supply

The two main components of the central nervous system are:

- A. Cranial and peripheral nerves.
- B. Spinal cord and autonomic ganglia.
- C. **Brain and spinal cord**
- D. Brain and its blood supply

- The **central nervous system (CNS)** represents the largest part of the nervous system, including the brain and the spinal cord. Together with the peripheral nervous system, it has a fundamental role in the control of behavior.



Of the following general statements, the one that BEST describes the relationship between the peripheral nervous system and muscle tissue:

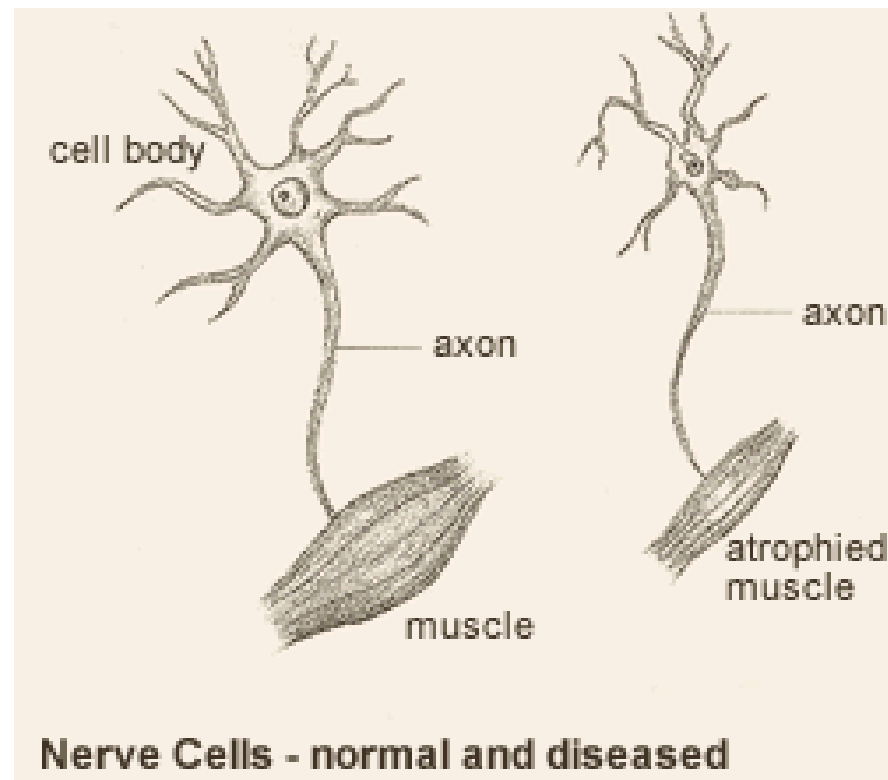
- A. Both branches of the autonomic system (sympathetic and parasympathetic) have direct control of reflexive responses in skeletal muscle groups
- B. Somatic sensory nerves have direct control over smooth muscles
- C. Somatic sensory nerves have direct control over skeletal muscles
- D. Somatic motor nerves have direct control over skeletal muscles



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- C. Somatic sensory nerves have direct control over skeletal muscles
- D. Somatic motor nerves have direct control over skeletal muscles**

- **Motor nerves** enable the brain to stimulate muscle contraction. A motor nerve is an efferent nerve that exclusively contains the axons of motoneurons, which innervate skeletal muscle.



All of the vessels carrying blood away from the heart have three layers except:

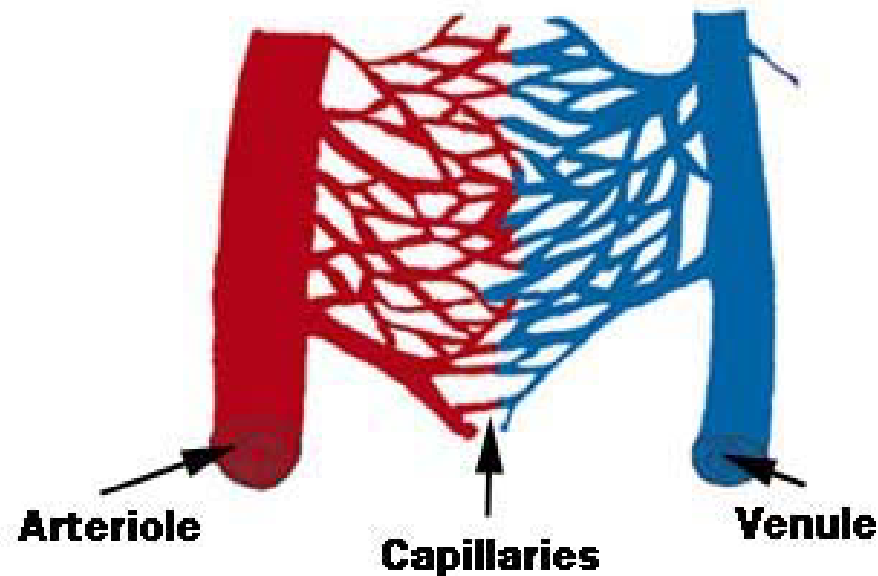
- A. Arterioles
- B. Small to medium sized arteries
- C. Capillaries**
- D. Large arteries



All of the vessels carrying blood away from the heart have three layers except:

- A. Arterioles
- B. Small to medium sized arteries
- C. Capillaries**
- D. Large arteries

- Unlike the arteries and veins, capillaries are very thin and fragile. The capillaries are actually only one epithelial cell thick. They are so thin that blood cells can only pass through them in single file.



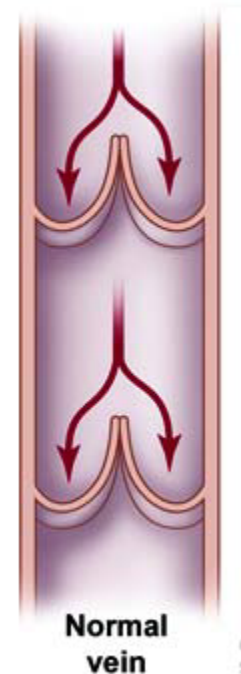
The statement about veins of the lower extremities that is UNTRUE is:

- A. Suction from the heart draws blood through the veins to the right side of the heart.
- B. Muscular contraction against deep veins squeezes blood past venous valves to return blood to the right side of the heart.
- C. Veins are made of epithelial, muscle/elastin and support levels and have irregular cross-section
- D. Deep veins carry more blood back to the heart than the superficial veins.

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- D. Deep veins carry more blood back to the heart than the superficial veins.

- Arteries bring oxygen-rich blood from your heart to the rest of your body. Veins return oxygen-poor blood back to your heart. To help move blood back to your heart, your leg muscles squeeze the deep veins of your legs and feet. One-way flaps called valves in your veins keep blood flowing in the right direction.



Skeletal muscle is:

- A. Voluntary and nonstriated
- B. Involuntary and nonstriated
- C. Voluntary and striated
- D. Involuntary and striated

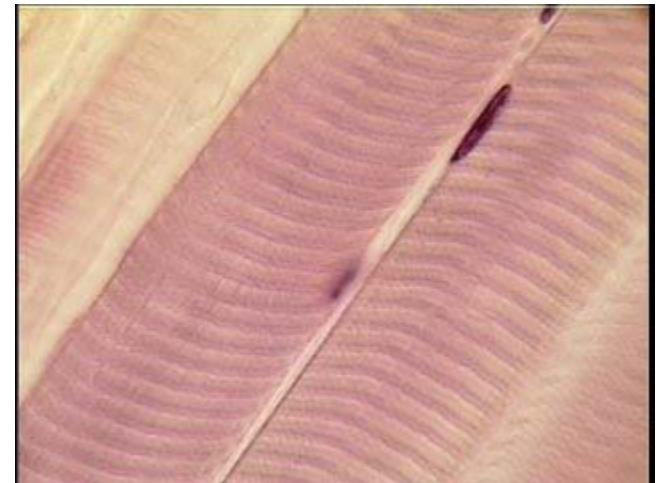


Skeletal muscle is:

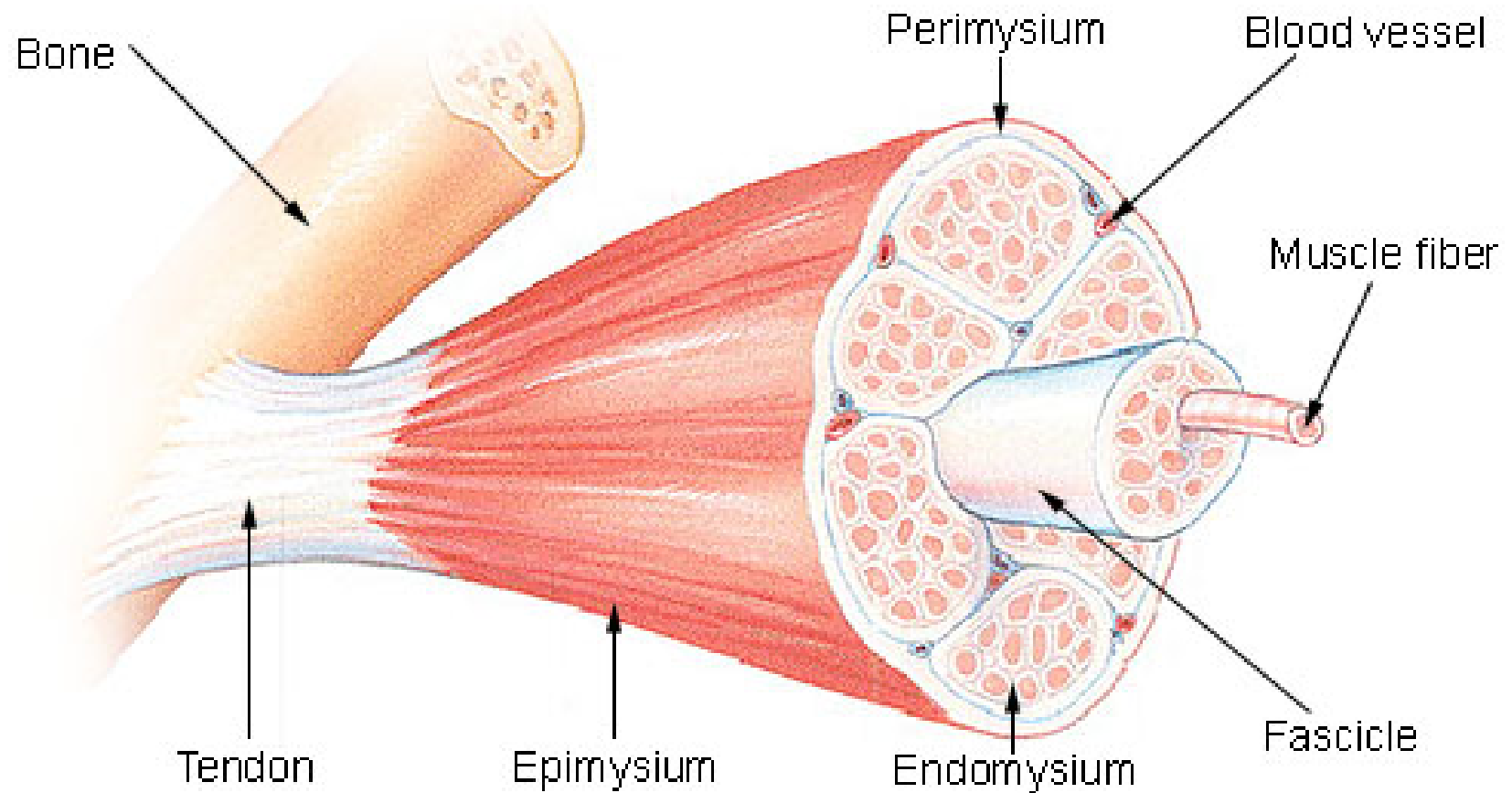
- A. Voluntary and nonstriated
- B. Involuntary and nonstriated
- C. Voluntary and striated**
- D. Involuntary and striated



- **Skeletal muscle** is a type of striated muscle, attached to the skeleton. Skeletal muscles are used to facilitate movement, by applying force to bones and joints; via contraction. They generally contract voluntarily via nerve stimulation.



Structure of a Skeletal Muscle



It is ethical for a pedorthist to accept a division of fees when:

- A. referring a patient to a physician
- B. participating in a fee sharing program
- C. dispensing an orthotic without a prescription
- D. None of the these



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- A. referring a patient to a physician
- B. participating in a fee sharing program
- C. dispensing an orthotic without a prescription
- D. **None of the these**



It is unethical for a pedorthist to accept a division of fees when referring a patient to a physician, participating in a fee sharing program, or dispensing an orthotic without a prescription.



Whose responsibility is it to determine the duration and time of termination of a patient's care?

- A. pedorthist
- B. patient
- C. nurse
- D. physician



Whose responsibility is it to determine the duration and time of termination of a patient's care?

- A. pedorthist
- B. patient
- C. nurse
- D. **physician**



- The physician is the one who originally wrote the prescription and ordered the treatment. He is the one to determine the length and scope of treatment. The rest of the team may have input, but discontinuing treatment requires a doctor's order.



All of the following should be found on your patient charts except:

- A. instructions to the patient
- B. follow up appointment
- C. log of discussions with doctors and specialists
- D. family members names and id numbers



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- A. instructions to the patient
- B. follow up appointment
- C. log of discussions with doctors and specialists
- D. family members names and id numbers**



- Family member names and other sources of identification may be found in the chart, but this information is superfluous and not required.



Which of these is not a Pedorthic device?

- A. Prefabricated Foot Care Products
- B. Therapeutic Shoes
- C. Partial Foot Prostheses
- D. Foot Orthoses

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- B. Therapeutic Shoes
- C. Partial Foot Prostheses
- D. Foot Orthoses

Pedorthic Devices

- Pedorthic devices do not include non-therapeutic inserts or footwear regardless of method of manufacture; unmodified, non-therapeutic over-the-counter shoes; or prefabricated foot care products.

A document must have what to make it valid and legal?

- A. Facility name
- B. Signature and date
- C. Treatment suggested
- D. Suggested material and shoe type



A document must have what to make it valid and legal?

- A. Facility name
- B. **Signature and date**
- C. Treatment suggested
- D. Suggested material and shoe type



Prescription with signature but no date

R_x

Cancellation E.O.S.V.

(849-8391)

exercice 14 jointe
exercice de classe.



A réviser ☐



CFS

Allied Health Education

The original physician's prescription should be:

- A. Returned to the patient
- B. Returned to the physician
- C. Discarded after it has been filled
- D. Kept in the patient's file



The original physician's prescription should be:

- A. Returned to the patient
- B. Returned to the physician
- C. Discarded after it has been filled
- D. Kept in the patient's file**



Patients file should include:

- Medical history
- Intake, assessment, and prescription/order information
- Patient treatment plan
- Follow-up, progress reports, and performance outcome measures
- Patient satisfaction survey



The disadvantage of using a univalve cast compared to a bivalve cast for molded shoes is:

- A. application is time consuming
- B. it is uncomfortable to the patient
- C. a cast saw is required
- D. the plaster dries to quickly

The disadvantage of using a univalve cast compared to a bivalve cast for molded shoes is:

- A. application is time consuming
- B. it is uncomfortable to the patient
- C. **a cast saw is required**
- D. the plaster dries too quickly

- A cast saw is required to remove a univalve cast.



CFS

Allied Health Education

Why is a casting board used?

- A. provide heel lift
- B. make the plantar aspect of the cast as flat as possible
- C. keep the floor clean
- D. determine the position for a rocker



Why is a casting board used?

A. provide heel lift

B. make the plantar aspect of the cast as flat as possible

C. keep the floor clean

D. determine the position for a rocker



- When casting for a custom shoe, use a casting board with a $\frac{1}{2}$ " - $\frac{3}{4}$ " pitch under the heel. This will create some plantarflexion and help ensure that the toes are not dorsiflexed in the cast.



Which of the following techniques is most appropriate for a subtalar control foot orthosis?

- A. Neutral position slipper cast
- B. Foam impression box
- C. Fiberglass casting sock
- D. Direct molding



Which of the following techniques is most appropriate for a subtalar control foot orthosis?

- A. Neutral position slipper cast
- B. Foam impression box
- C. Fiberglass casting sock**
- D. Direct molding



- Fiberglass resin impregnated casting socks work well for Subtalar Control Foot Orthosis casting.



STS® Casting Socks

A patient had a stroke resulting in a right hemiplegia. They need a shoe with a Velcro closure and a D ring. How would you construct the shoes for this individual?

- A. Left shoe: medial D ring, lateral strap; right shoe: medial D ring, lateral strap
- B. Left shoe: lateral D ring, medial strap; right shoe: medial D ring, lateral strap
- C. Left shoe: medial D ring, lateral strap; right shoe: lateral D ring, medial strap
- D. Left shoe: lateral D ring, medial strap; right shoe: lateral D ring, medial strap



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- D. Left shoe: lateral D ring, medial strap; right shoe: lateral D ring, medial strap

- **Hemiplegia** (or *hemiphlegia*) is a condition where a vertical half of a patient's body is weak or paralyzed, i.e. one arm and its corresponding leg do not function properly. It can be congenital (occurring before, during, or soon after birth) or acquired (as from illness or stroke).

The preferred shoe type opening for severe edema:

- A. Lace-to-toe
- B. Velcro closure
- C. Balmoral
- D. Blucher



The preferred shoe type opening for severe edema:

- A. **Lace-to-toe**
- B. Velcro closure
- C. Balmoral
- D. Blucher

- Lace-to-toe shoes may be used for chronic edema and post-operatively to allow for maximum opening to prevent trauma to healing tissues.



What instructions should you give a diabetic about their orthotics?

- A. Wear them while seated the first day
- B. Wear them from morning until noon or until comfortable
- C. Wear them 1 hour the first day; increase wear 1 hour a day each additional day
- D. Wear them all day, but inspect them during the day



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A typical wearing schedule for new Diabetic shoes and orthotics should include wearing them 1 hour the first day; increase wear 1 hour a day each additional day. It should also include watching for red spots or blistering. Finally, the patient should be instructed to discontinue use if complications occur.



A patient presents to you with a prescription asking for modifications to be made to the left shoe only. The patient explains that the problem however is with the right foot that requires the modifications. What should you do next?

- A. The prescription should be filled as written
- B. The prescribing doctor should be called to tell him/her of their mistake
- C. Since this is an obvious minor mistake, you should modify the right shoe
- D. The prescribing doctor should be called for clarification of the Prescription



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- D. The prescribing doctor should be called for clarification of the Prescription**



- If the prescription and the patients condition do not agree, the prescribing doctor should be called for clarification of the Prescription

Which of the following is the best pattern for an extra depth shoe?

- A. Blucher
- B. Balmoral
- C. Loafer
- D. Slip-last



Which of the following is the best pattern for an extra depth shoe?

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B. Balmoral

C. Loafer

D. Slip-last



- Blucher: A front-laced shoe in which the quarters are not attached at the throat of the shoe.



Edema is:

- A. Diffuse redness of the skin
- B. Swelling
- C. Lack of blood flow to an area
- D. Purple color often associated with a bruise

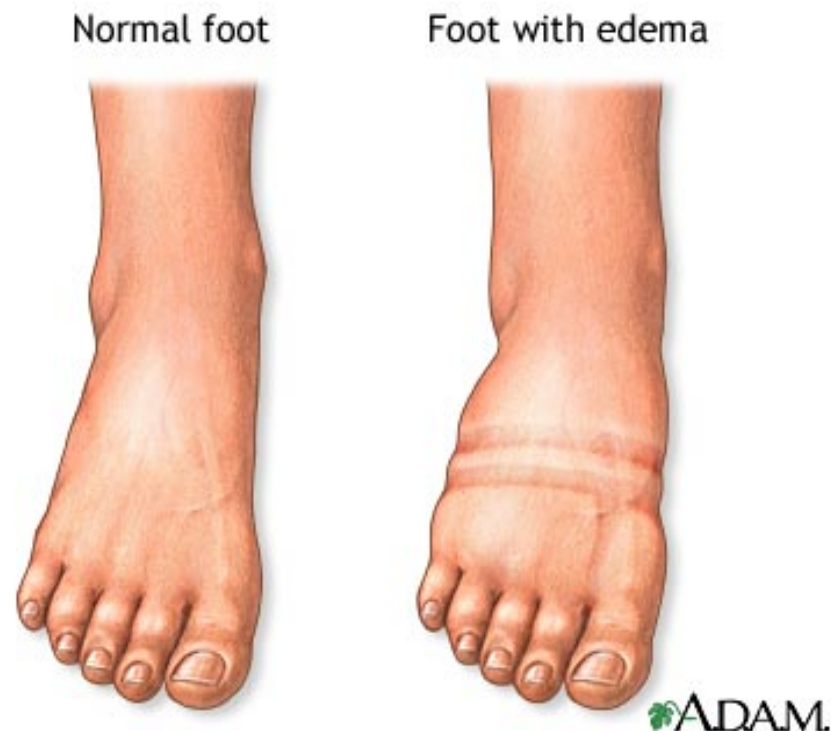


Edema is:

- A. Diffuse redness of the skin
- B. **Swelling**
- C. Lack of blood flow to an area
- D. Purple color often associated with a bruise



- Edema is an abnormal accumulation of fluid in intercellular spaces.



- The abnormal buildup of fluid in the body is called edema. Edema is commonly seen in the feet and ankles, because of the effect of gravity, swelling is particularly noticeable in these locations. Common causes of edema are prolonged standing, prolonged sitting, pregnancy, being overweight, and increase in age.

Necrosis or necrotic is:

- A. foul smelling tissue
- B. bruised tissue
- C. dead tissue
- D. reddened tissue



Necrosis or necrotic is:

- A. foul smelling tissue
- B. bruised tissue
- C. **dead tissue**
- D. reddened tissue



- Necrosis means death of tissue in the body. This happens when not enough blood is supplied to the tissue, whether from injury, radiation, or chemicals. Necrosis is not reversible.
- When substantial areas of tissue die due to a lack of blood supply, the condition is called gangrene.



Erythema is:

- A. diffuse redness of the skin
- B. swelling
- C. lack of blood flow to an area
- D. indurated skin



Erythema is:

- A. **diffuse redness of the skin**
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- C. lack of blood flow to an area
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- Erythema is redness of the skin caused by increased blood flow to the capillaries.



Hyperhydrosis is:

- A. insufficient perspiration
- B. excessive perspiration
- C. thickening of the sole of the foot
- D. dermatitis

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- B. **excessive perspiration**
- C. thickening of the sole of the foot
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- Hyperhidrosis of the feet, otherwise known as plantar hyperhidrosis is a common problem and can be treated with Iontophoresis. Surgery is not generally recommended. Cotton socks should be worn and feet left open as often as possible. Synthetic shoes and man made fibers tend to exacerbate this problem.



Peripheral neuropathy refers to:

- A. Nerve degeneration at the extremities
- B. An excessive number of nerves
- C. Diabetes
- D. Arthritis



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- Peripheral neuropathy describes damage to the peripheral nervous system, the vast communications network that transmits information from the central nervous system to every other part of the body. Peripheral nerves also send sensory information back to the brain and spinal cord, such as a message that the feet are cold or a finger is burned. Damage to the peripheral nervous system interferes with these vital connections. Like static on a telephone line, peripheral neuropathy distorts and sometimes interrupts messages between the brain and the rest of the body.



Ischemia is:

- A. Bruising due to trauma and tissue destruction
- B. Swelling due to lymphatic blockage
- C. Deficiency of blood due to constriction or obstruction of a blood vessel
- D. Redness due to excessive pressure or shearing forces

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- Ischemia (isch- is restriction, hema or haema is blood) is a restriction in blood supply, generally due to factors in the blood vessels, with resultant damage or dysfunction of tissue.



An elevated left shoulder during gait possibly indicates:

- A. Long right upper extremity
- B. Short right upper extremity
- C. Long right lower extremity
- D. Short right lower extremity



An elevated left shoulder during gait possibly indicates:

- A. Long right upper extremity
- B. Short right upper extremity
- C. Long right lower extremity
- D. **Short right lower extremity**

- LLD can be due to many causes. These are divided into three groups: congenital (from birth), developmental (from a childhood disease or injury that slows or damages the growth plates), and posttraumatic (from a fracture that leads to shortening of the bone ends).



Ataxic gait is:

- A. Painful gait
- B. Unsteady gait
- C. Dropfoot gait
- D. Abducted gait



Ataxic gait is:

- A. Painful gait
- B. Unsteady gait**
- C. Dropfoot gait
- D. Abducted gait



- Ataxia (from Greek ataxiā, meaning failure to put in order) is unsteady and clumsy motion of the limbs or trunk due to a failure of the gross coordination of muscle movements. Patients with ataxia are diagnosed and treated by neurologists.

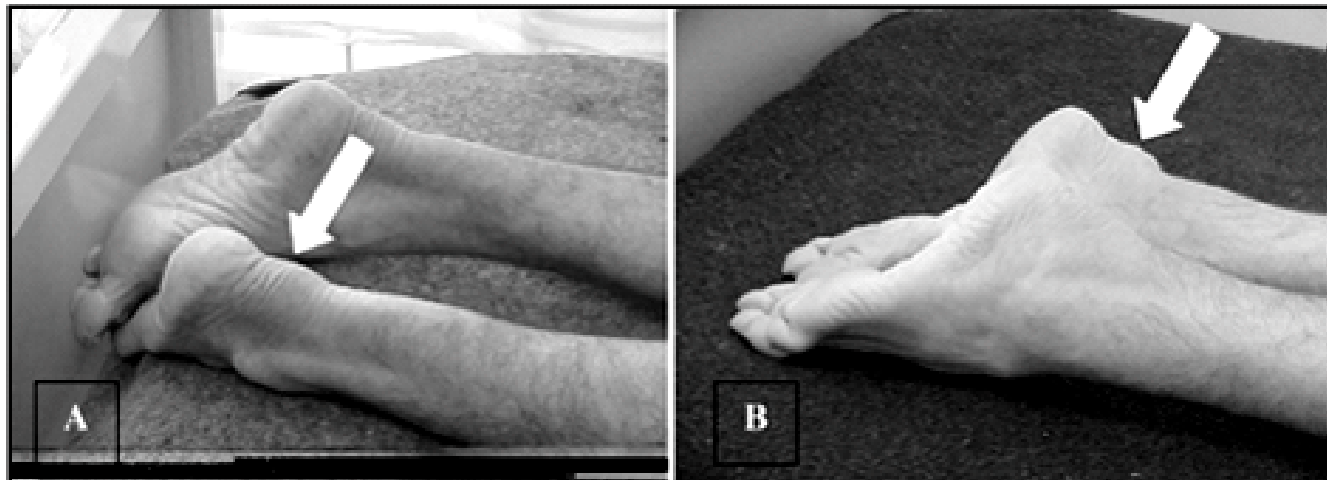


Fig 1. Achilles tendon xanthomas (arrows): case 1 (A) and case 2 (B).

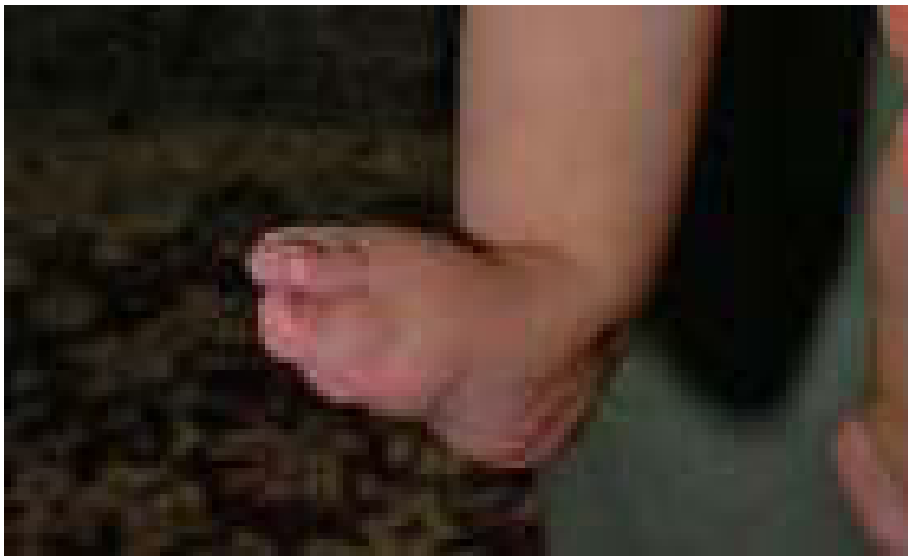
Spina bifida, a congenital deformity which involves a hole in a malformed vertebrae and a protrusion of the meninges through the spinal column causing neurological ramifications and deformities in the foot characterized by all of the below EXCEPT:

- A. Insensate feet
- B. Neuropathic ulcerations
- C. Vertical talus and congenital convex pes planovalgus deformity
- D. Pes cavus

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- Spina bifida is the most common of a group of birth defects called neural tube defects (NTDs). The neural tube is the embryonic structure that develops into the brain and spinal cord. Often called open spine, spina bifida affects the backbone and, sometimes, the spinal cord.



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Allied Health Education

Multiple sclerosis is characterized in the foot by:

- A. Dropfoot
- B. Tiredness and weakness
- C. Numbness
- D. All of these



Multiple sclerosis is characterized in the foot by:

- A. Dropfoot
- B. Tiredness and weakness
- C. Numbness
- D. **All of these**

- Multiple sclerosis (MS) is a chronic, potentially debilitating disease that affects the central nervous system, which is made up of the brain and spinal cord. In multiple sclerosis, the body incorrectly directs antibodies and white blood cells against proteins in the myelin sheath, which surrounds nerves in your brain and spinal cord. This causes inflammation and injury to the sheath and ultimately to the nerves that it surrounds. The result may be multiple areas of scarring (sclerosis). Eventually, this damage can slow or block the nerve signals that control muscle coordination, strength, sensation and vision.



A patient presents with an area of thickened skin localized over the dorsal aspect of the proximal interphalangeal joint of the fifth digit. Which of the following would be the most appropriate explanation for the patient?

- A. This problem is not related to shoe gear
- B. This is an ulcer and may become infected
- C. This is a plantar wart and will not be treated by shoe gear change
- D. This has occurred as a result of the area receiving constant pressure

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- D. This has occurred as a result of the area receiving constant pressure**



- Corns are thickened layers of skin caused by repeated pressure or friction. Hard Corn is the most common type of corn. They tend to develop over a bony prominence.



Which of the following is most appropriate for the pedorthic treatment of plantar fasciitis?

- A. A soft heel counter
- B. A heel cushion
- C. A negative heel
- D. Medial longitudinal arch support

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- Plantar Fasciitis, an inflammation (irritation and swelling with presence of extra immune cells) of the thick tissue on the bottom of the foot that causes heel pain and disability. The plantar fascia is a very thick band of tissue that covers the bones on the bottom of the foot. This fascia can become inflamed and painful in some people, making walking more difficult. Some risk factors for development of this problem include foot arch problems (both flat foot and high arches), obesity, sudden weight gain, running and a tight Achilles tendon (the tendon connecting the calf muscles to the heel).

Characteristics seen in gait with a patient with equinus are all except:

- A. Abducted angle of gait
- B. Early heel off
- C. Supinated foot during stance phase of gait
- D. Pronated foot during stance phase of gait

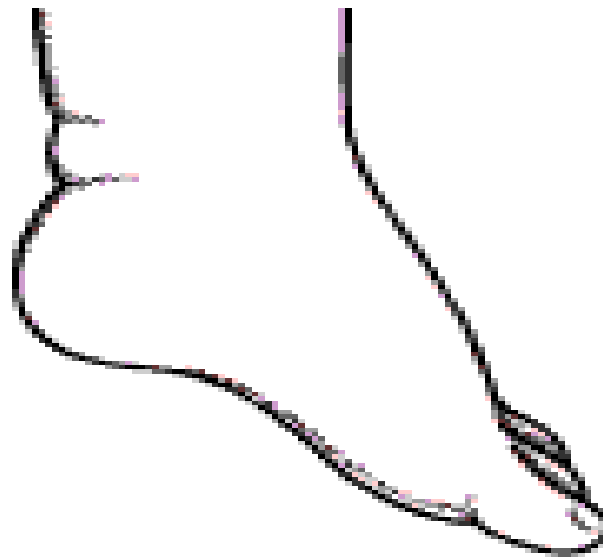


Characteristics seen in gait with a patient with equinus are all except:

- A. Abducted angle of gait
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- C. Supinated foot during stance phase of gait**
- D. Pronated foot during stance phase of gait

- Equinus is a fixed plantar flexion of the ankle.

Talipes Equinus



In the pediatric patient with metatarsus adductus, the characteristics in gait are all except:

- A. Clumsiness and falling
- B. Flatfoot
- C. Intoeing gait
- D. Night cries and not staying in own bed

In the pediatric patient with metatarsus adductus, the characteristics in gait are all except:

- A. Clumsiness and falling
- B. Flatfoot**
- C. Intoeing gait
- D. Night cries and not staying in own bed

- Severe intoeing may appear to cause young children to stumble or trip, particularly if they are wearing long or floppy shoes. Intoeing usually does not cause pain or interfere with the child learns to walk.



An example of metatarsus adductus

Charcot-Marie-Tooth Disease, a hereditary disease, affects the peroneal nerve causing muscle weakness and atrophy. This disease causes deformities in the foot mostly characterized by:

- A. Pes Planus
- B. Rearfoot valgus
- C. Pes cavovarus with hammered hallux
- D. Hallux Valgus

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- B. Rearfoot valgus
- C. Pes cavovarus with hammered hallux**
- D. Hallux Valgus

Charcot – Marie – Tooth: A neurological disorder affecting the nerves that control the muscles. Results in the degeneration of the nerves in the extremities which causes a gradual loss of normal use of the feet/legs, and hands/arms. Characteristics include a high-arched Pes Cavus foot with hammer toes, foot drop and frequent ankle Strains.



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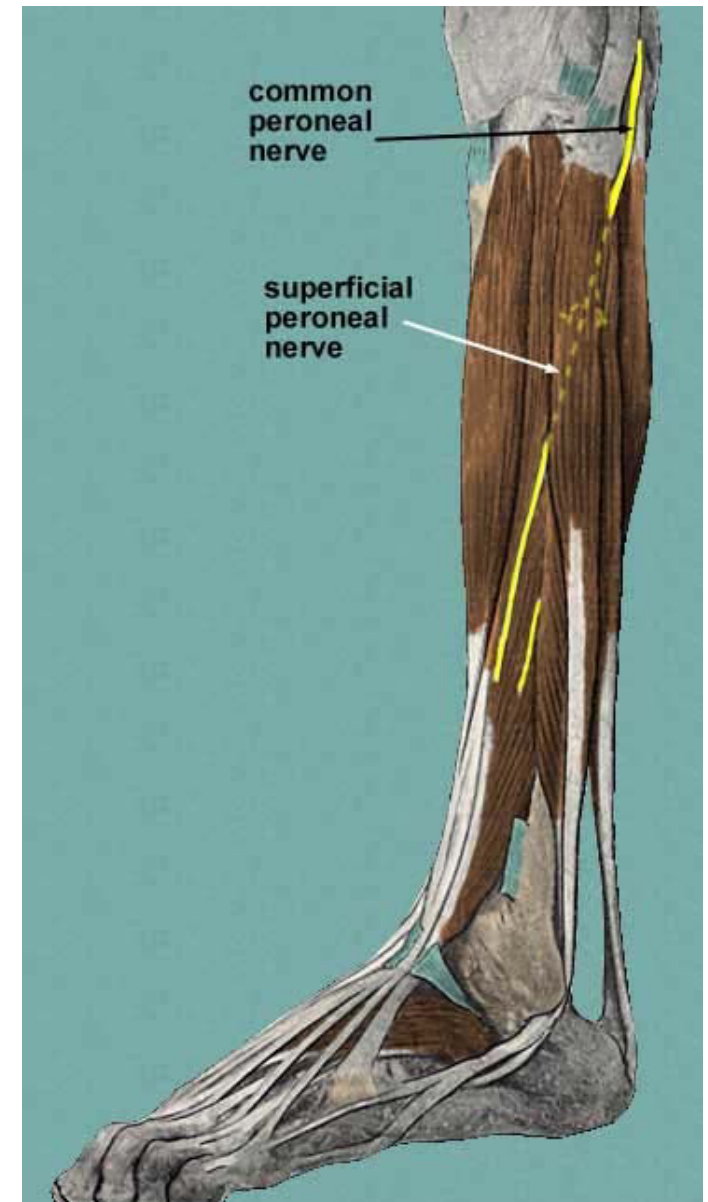
Common peroneal nerve malfunction leads to all except:

- A. Numbness to the bottom of the foot
- B. Numbness to the dorsum of the feet
- C. Dropfoot
- D. Inability to stabilize the transverse arch

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- The superficial peroneal nerve branches from the common peroneal nerve near the neck of the fibula and passes between the peroneus longus and brevis muscles, at which point they supply the muscles. The superficial branch then continues onto the dorsum of the foot to supply the skin there.



A patient presents with an unstable gait secondary to a residual clubfoot deformity which causes her to collapse laterally. Which of the following modifications would be most appropriate?

- A. Lateral heel and sole flares
- B. Medial heel and lateral sole flares
- C. Lateral heel and medial sole flares
- D. Medial heel and sole flares

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- A clubfoot has a typical appearance of pointing downward and being twisted inwards. Uncorrected clubfoot in an adult causes only part of the foot, usually the outer edge, or the heel or the toes, to touch the ground. For a person with clubfoot, walking becomes difficult or impossible.



A diabetic patient with significant neuropathy presents with a unilateral rocker bottom flat foot and significant widening of the midfoot. Which of the following is the most likely diagnosis?

- A. severe arthritic foot
- B. traumatized midfoot
- C. Charcot deformity
- D. Pes planus

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- Charcot foot is a complication of diabetes that almost always occurs in those with neuropathy (nerve damage). When neuropathy is present, the bones in the foot become weakened and can fracture easily, even without there being any major trauma. As the neuropathy is present, the pain goes unnoticed and the person continues to walk on it. This can lead to severe deformities of the foot. As this can be very disabling, early diagnosis and treatment is vitally important.
- Another way to consider it - imagine spraining your ankle and not knowing you have done this. You will continue to walk on it - imagine the damage that this would do. This is what happens in a Charcot foot.

- Charcot Foot



Which of the following shoes would be most appropriate for a patient with severe deformity?

- A. an extra depth shoe
- B. a super depth shoe
- C. a high top athletic shoe
- D. custom made depth shoe



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Shoe that is individually made by a molded process over a modified positive model of the individual's foot. Custom-molded shoes can be therapeutic or standard.



Which of the following types of orthoses is most appropriate for a patient with a symptomatic tarsal coalition?

- A. Functional orthosis
- B. Rigid orthosis
- C. Accommodative orthosis
- D. Pronated orthosis

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- Painful flat feet are often caused by a condition called tarsal coalition. In tarsal coalition, two or more of the bones in the foot fuse together limiting motion and often leading to a flat foot.



Which of the following is most appropriate for treating a stage 2 posterior tibial tendon dysfunction?

- A. Accommodative orthosis
- B. Subtalar control foot orthosis
- C. Medial heel wedge shoe modification
- D. Mild rocker

Which of the following is most appropriate for treating a stage 2 posterior tibial tendon dysfunction?

- A. Accommodative orthosis
- B. Subtalar control foot orthosis**
- C. Medial heel wedge shoe modification
- D. Mild rocker

- A damaged posterior tibial can be caused by trauma, a degenerative tear (simple deterioration over time), muscle dysfunction or tenosynovitis (inflammation of the tendon). It may be treated with a SCFO.



What would be the best material to use for pes planus?

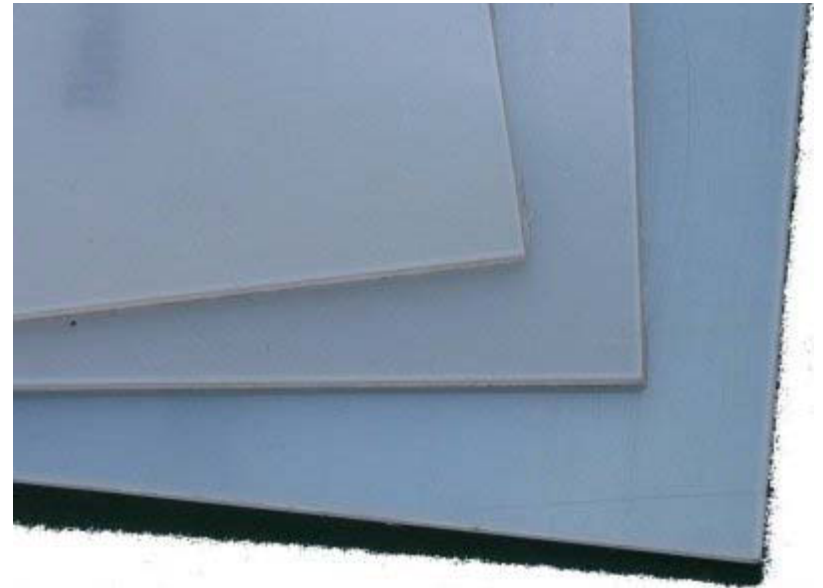
- A. microcell puff
- B. pink plastazote
- C. pelite
- D. polypropylene



What would be the best material to use for pes planus?

- A. microcell puff
- B. pink plastazote
- C. pelite
- D. polypropylene**

- A semi-rigid functional polypropylene orthotic helps to hold the pes planus foot in proper position and give it an artificial arch.



A child with a hypermobile foot with excessive pronation and rearfoot mobility could be fitted into a _____ to best control the problem.

- A. functional polypropylene orthotic
- B. UCBL
- C. accommodative orthotic
- D. straight last shoes

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B. UCBL

C. accommodative orthotic

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A child with a hypermobile foot with excessive pronation and rearfoot mobility could be fitted into a University of California Biomechanical Laboratories foot orthosis to best control the problem.



What motion does the foot go into when the posterior tibial tendon is ruptured?

- A. Pronation of the forefoot
- B. Pronation of the rearfoot
- C. Plantarflexion of the ankle
- D. Dorsiflexion of the ankle



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- B. Pronation of the rearfoot**
- C. Plantarflexion of the ankle
- D. Dorsiflexion of the ankle

- Some Pedorthists will tell patients to have someone stand behind the patient and see if there is a “too many toes” sign. When their feet are viewed from behind, the viewer should only see two toes, but in an affected foot, upwards of four toes will be seen because of the foot’s flat appearance and excessive inward pronation.



What preparation of a positive cast is done for the purpose of creating an orthotic device for a diabetic with an ulcer?

- A. Add plaster to the negative cast in the area of the ulcer
- B. Add plaster to the positive in the area of the ulcer
- C. Remove plaster from the positive in the area of the ulcer.
- D. None of the above.

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- What is added onto the mold, is subtracted from the orthotic. In other words, a convex mound on the mold, will be a concavity in the orthotic. Your end goal is a concavity in the orthotic in the areas of ulceration. This will provide pressure relief.

A patient has a script for negative rocker shoes and a total contact insole. The DX is heel spur and Achilles tendonitis.

- A. The prescription is correct for both the heel spur and Achilles tendonitis.
- B. The prescription is correct for the heel spur, but incorrect for Achilles tendonitis.
- C. The prescription is incorrect for the heel spur, but correct for Achilles tendonitis.
- D. The prescription is incorrect for both the heel spur and Achilles tendonitis.



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- A negative rocker sole will place additional pressure on the heel. It will also cause additional stress on the Achilles Tendon. To give relief to the Achilles Tendon, the heel cord must be shortened by lifting the heel. To provide relief for the heel, rather than going with a total contact, consider spot heel relief either with use of a horseshoe pad or with a PPT cushion.

A patient comes to your facility with a script for diabetic shoe. During the evaluation you notice a scar on the medial side of the leg. What do you do?

- A. Don't embarrass the patient by asking
- B. Call the prescribing physician
- C. Ask patient about history of the scar
- D. None of the above



A patient comes to your facility with a script for diabetic shoe. During the evaluation you notice a scar on the medial side of the leg. What do you do?

- A. Don't embarrass the patient by asking
- B. Call the prescribing physician
- C. Ask patient about history of the scar**
- D. None of the above



- Obviously, the patient needs to be asked about the scar tactfully. But a medial scar may be indicative of past (or present) vascular insufficiency. The patient may have had vein harvesting from this leg. If so, circulation may be an issue you need to take into consideration.

Which of the following statements regarding ankle equinus is false?

- A. May be associated with a short or tight Achilles tendon
- B. At least 20 degrees of ankle dorsiflexion will be available
- C. An early heel-off may be observed during gait
- D. Will generally cause subtalar joint pronation during stance and gait

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- A Sagittal plane deformity in which there is less than 10° of available dorsiflexion at the ankle joint, when the Subtalar joint is in its neutral position and the midtarsal joint is fully locked.



All of the following clinical findings may occur with a Hallux Limitus condition except:

- A. Greater than 65 degrees of dorsiflexion motion of the hallux
- B. Dorsal osseous prominence on head of first metatarsal
- C. Apropulsive or abducted gait pattern
- D. Pain during propulsive phase of gait

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- Hallux Limitus is arthritis of the MTP joint of the hallux. With Limitus, there is still mobility, although it is limited and painful. With Hallux Rigidus, there is very limited to no movement.



Which of the following is the mechanism of injury for a lateral ankle sprain:

- A. Eversion
- B. Inversion
- C. Eversion, torsion
- D. Inversion, plantarflexion



Which of the following is the mechanism of injury for a lateral ankle sprain:

A. Eversion

B. Inversion

C. Eversion, torsion

D. Inversion, plantarflexion



- As the ankle (overly) inverts, it hyperextends the ligaments of the lateral ankle and sprains the ankle.

Which of the following external shoe modifications would be most effective to help reduce lateral ankle sprain tendency?

- A. Thomas heel
- B. Rocker sole
- C. Medial heel wedge
- D. Lateral sole flare

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- B. Rocker sole
- C. Medial heel wedge
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- With a lateral sole flare, the foot is less likely to overly invert. Thus reducing the chance of lateral ligament ankle sprains.

All of the following foot types or deformities may contribute to increased lateral shoe sole and upper wear except which of the following?

- A. Rigid forefoot valgus
- B. Talipes equinovarus
- C. Acquired adult flatfoot
- D. Pes adductus (C-foot)

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- With acquired adult flatfoot, the wear pattern would be on the medial side of the shoe, not the lateral.



The most common type of muscle found in the toes is:

- A. Skeletal muscle.
- B. Smooth muscle.
- C. Cardiac muscle.
- D. None of the above.



The most common type of muscle found in the toes is:

- A. Skeletal muscle.
- B. Smooth muscle.**
- C. Cardiac muscle.
- D. None of the above.

- *A deliberately tricky question: Skeletal muscle is not found in the toes although tendon from such muscles might be present; Heart muscle is definitely not there; smooth muscle is found in glands, hair erectors, capillary controls which are all found in the toes.*